

IDRC-038e

Health Care
in
The People's Republic of China
A Bibliography with Abstracts

Shahid Akhtar

救死扶傷，實
革命的人道主義
——白求恩

Abstract This bibliography includes material on the approaches taken by The People's Republic of China to deliver health services to its people, both rural and urban. The material presented should prove useful to people concerned with providing health services and to those concerned with training auxiliary health workers. The literature concentrates on the now famous "barefoot doctors" of China, and covers the period 1949-74.

Résumé La présente bibliographie comprend une documentation relative aux solutions adoptées par la République Populaire de Chine en vue de distribuer des soins à sa population tant rurale qu'urbaine. La documentation présentée devrait s'avérer utile aussi bien aux personnes qui ont à fournir des soins qu'à celles qui doivent assurer la formation des auxiliaires sanitaires. Les textes dont il est fait mention mettent l'accent sur les célèbres "médecins aux pieds nus" de Chine et traitent des années 1949 à 1974.

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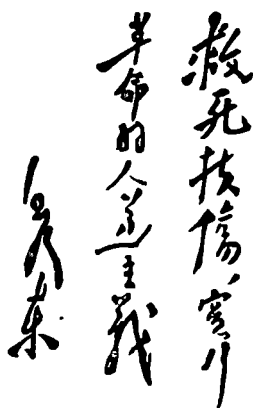
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With an Introduction by J. Wendell MacLeod



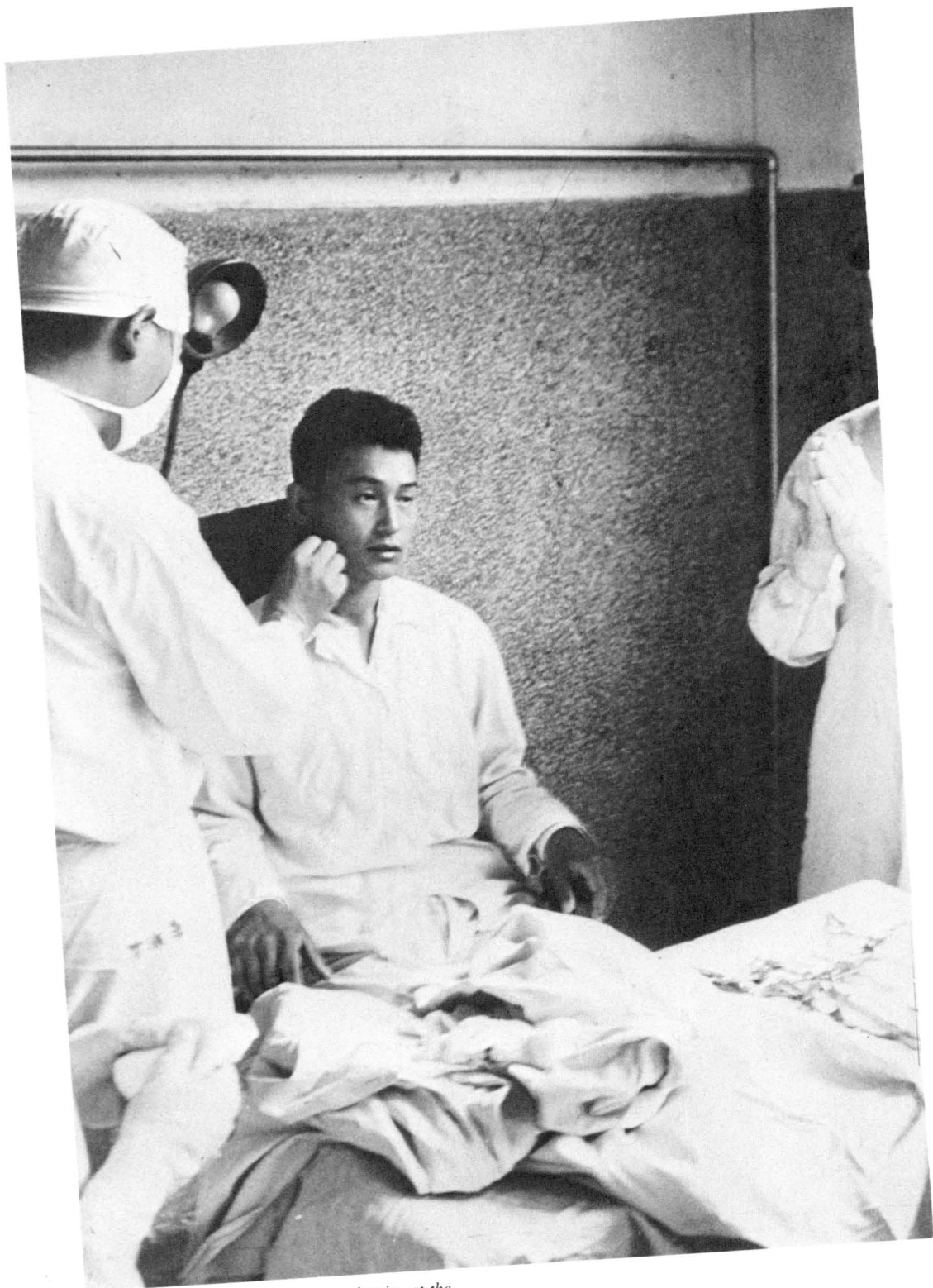
From the cover:

“Heal the wounded,
rescue the dying, practice
revolutionary humanitarianism.”

Mao Tse-tung

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*Tonsillectomy under acupuncture analgesia, at the
Bethune International Peace Hospital,
Shih-chia Chuang, Hopei Province*

Preface

The idea of a bibliography on health services in the People's Republic of China was conceived as an attempt to overcome the lack of information on this subject. In the light of China's remarkable accomplishments since 1949, especially in rural health care delivery, it is believed that information on the approaches taken by the Chinese should be made available to other countries interested in developing effective health services and population programmes that are suited to national needs and resources. In his introductory remarks, Dr J. Wendell MacLeod has identified the main features of China's experiences in health and population that are most relevant to the development process.

The material presented in this bibliography has been selected on the premise that its users would include: (a) those persons in developing countries who are planning, operating, or evaluating systems to provide health services and those persons concerned with the training of auxiliary health workers to staff such systems; and (b) organizations, like the International Development Research Centre (IDRC), that are supporting research into the problems of organizing and staffing systems for health care services to remote regions. Thus, the boundaries of interest of the bibliography have been set to include information most useful to persons working in programmes in developing countries or regions. The literature on the People's Republic of China contained in this bibliography has been selected from a much larger mass of collected documentation on systems designed for delivering health care services to developing regions. It concentrates primarily on new models of health care delivery and the training and utilization of auxiliary health workers. The larger mass of documentation will be published in a series of forthcoming annotated bibliographies tentatively entitled *Low-Cost Health Care in Rural Areas*.

The scope of this bibliography, and that of the forthcoming issues, includes materials on the following subjects:

- 1) Planning, financing, organization, utilization, and evaluation of systems designed to provide overall health care to people who lack access to conventional hospital and physician services, with special emphasis on rural areas and on metropolitan populations that, because of poverty or other reasons, do not take advantage of metropolitan medical services;

- 2) The impact of health care services on social and economic indices, including demographic

indices such as mortality, morbidity, nutrition, and epidemiological trends;

- 3) The relationships between health care systems and other community organizations and services, such as schools and agricultural extension programmes, and community participation in health care systems; and

- 4) Staffing of health care systems; the functions of different personnel, particularly paramedical personnel, their training (curricula), distribution, and utilization.

Not included in this bibliography are discussions of basic clinical medicine or biomedical research. There are no references to literature on population and family planning programmes except for instances where family planning is an integral part of health services or where auxiliaries are utilized.¹ Literature primarily concerned with particular techniques, e.g. reimplantation surgery, treatment of burns, treatment of deaf mutes, and the use of acupuncture, is not included. However, reference sources and bibliographies on biomedical research, population, and acupuncture have been included in Chapter I.1, I.2, and I.3 respectively, as well as Appendix III. In each one of these chapters emphasis has been placed on reference works, bibliographies, guides, directories, news bulletins, and other special sources of information. They can all be scanned for further bibliographical references. In addition, most of the items included in this bibliography contain their own bibliographies; an attempt was made to indicate in each case whether a particular work contained a bibliography and the reader is advised to refer to them for additional information.

Material for this collection has been gathered in several ways. In a special effort to retrieve the unpublished "fugitive" literature, such as theses, essays, papers presented at conferences, etc., personal contact was made with individuals most familiar with literature on the subjects. In addition, information was requested from numerous health-related libraries, organizations, and universities throughout the world. A brief list of the

¹ In chapter VI we have listed only a few of the documents that discuss population and family planning in the context of integrated health services. Apart from those references listed in Chapter I.2, there is a large number of bibliographies on population and family planning that we recommend to the reader if population and family planning are his special interests, including the abstracting journal *Population Index*.

individuals and institutions contacted in this regard is given as Appendix IV.

Searches were also conducted in numerous abstracting/indexing journals, bibliographies, professional journals, etc., and special computer searches were commissioned from a number of sources to supplement the information gathered through manual searching.

The overwhelming majority of the entries are published works, including books, articles or chapters in books, and articles appearing in professional journals. Unpublished documents and theses were also listed if they were relevant to the areas described above. No newspaper articles have been included. In general, the works listed in this bibliography cover the period from the early 1950's to June 1974. For the period 1950 to 1959 there are 46 references, and for 1960 to 1969 there are 160. For successive years, the number of references are as follows: 18 for 1970, 35 for 1971, 99 for 1972, 145 for 1973 and 29 for 1974.

Although a great deal more material was received than has been included in the bibliography, care was taken to select for annotation only those works that would be most useful to persons involved in community health work. The collection consists mainly of materials from sources outside the People's Republic of China. Some material from English language publications of the People's Republic, such as *Peking Review*, are included, but reference to English language translations or original Chinese materials is given in Appendices II and III.

Every attempt has been made to give accurate, complete data for each entry. However, some works were not included in the bibliography, due partly to the fact that we were unable to verify the sources and partly to difficulties encountered in obtaining the publications for processing. These references have nevertheless been listed in Appendix I with whatever information we had on them.

The entries have been arranged in chapters. Extreme difficulty was encountered in assigning a chapter to a number of entries as they were of a very general nature and really covered three or four topics at a time. Hence the large number of works assigned to Chapter V.1. Some works have been cross-referenced by a "See also" reference in two chapters, with the bibliographic citation and abstract appearing in the more important chapter of the two.

The bibliographic entries have been arranged alphabetically in order of the principal authors',

editors', or compilers' surnames. Anonymous articles are placed alphabetically in order of the corporate body sponsoring the document.

Articles such as "The", "An", etc. have been deleted where they appear as the first word in a title. Non-English titles are provided in either the original language or a transliterated version with the English translation in parentheses. Diacritical markings have had to be omitted from foreign names and citations because the bibliography is computer-generated.

The source information is provided in full without any abbreviations and the title of the journal is followed in parentheses by the city of publication. This in turn is followed by the volume number and then the issue number in parentheses. The last figure on the line represents page number(s).

Abstracts have been prepared by IDRC staff members, and by the Multilingual Services Division, Secretary of State, Ottawa.

All of the bibliographic information, including abstracts, has been stored in the ISIS (Integrated Set of Information Systems) computer system presently in operation at IDRC. Literature is indexed using a controlled vocabulary that makes possible custom searches for people with an interest in a very specific topic, such as barefoot doctor (auxiliary health worker) training. The subject index at the end of this bibliography is computer-generated from the keywords that have been assigned to each entry. Since all this information has been stored in a computer, it can be updated from time to time. We would, therefore, appreciate receiving any items that we might have excluded from the present bibliography, as well as any items listed in Appendix I.

IDRC unfortunately is not able to supply copies of all material listed in this bibliography. Every effort has been made to ensure that publisher information (for books: publisher, place and date of publication; for journals: journal and article titles, place and date of publication, volume and issue number, and paging) is complete and accurate, so that the seeker should have no difficulty in identifying and obtaining commercially available material.

We recognize that some of the fugitive literature (papers and reports produced for limited distribution) may be more difficult to locate. If local bookshops and libraries are unable to supply this material, interested persons in developing countries may apply to *China Bibliography, c/o Library, IDRC, Box 8500, Ottawa, Canada K1G 3H9*, using the coupons from the back of this bibliography. It is assumed this service will

be used only to procure a few papers of special importance to the requestor. Anyone seeking to build up a comprehensive collection of this material should make use of his usual local sources of supply.

The studies are indexed by author and subject. Articles, documents, and authors cited in Appendices I-III have not been included in any one of the indexes.

I wish to thank the many individual authors and institutions who assisted me in the collection of materials for this edition. Without the efforts of G.A. Mendel and his staff of translators at the Multilingual Services Division of the Secretary of State Department, Ottawa, the wealth of foreign literature included in this edition could not have been abstracted.

This bibliography could not have been completed without the unstinting support of the staff of the IDRC Library. In addition, thanks are due to Marianne Forsyth and Lynette Yip Young, whose numerous suggestions improved the bibliography greatly; to Kate Wild, Faye Shaver, and Shirley Witham for handling the computerization of it; to Wendy McRae for abstracting, research, and editorial assistance; and to Heather Perry for her general collaboration and efficient typing of my various revisions.

SHAHID AKHTAR
*International Development
Research Centre, Ottawa*

Introduction

The Significance of the Chinese Experience in Health Care

It is axiomatic that the study of a complex subject requires access to a wide variety of sources of information. An annotated bibliography permits the searcher to pursue original reports representing a broad spectrum of observations and reflections. Some may be disappointed that the bibliography that Mr Akhtar has edited does not cover the literature on diagnostic and curative medicine, especially acupuncture and biomedical research. Apart from the question of bulk, I believe the omission is justified on the ground that these topics are less clearly related to the social and economic development of a country and the general well-being of its people than is often assumed. Historically, improved longevity in Britain and Europe may have been due primarily to improved nutrition following the agricultural revolution rather than to public health measures that came later; or to more rational methods in clinical medicine that came still later. In this century of fabulous progress in medical science and practice, it will be interesting to see at the end of the century whether the young adult male in affluent Western countries will show any significant increase in life expectancy; or any advantage over his double in the People's Republic of China where health matters are linked in a different way to a different social context and life style.

Despite this century's extraordinary advances in science and technology, including the means to communicate new knowledge and skills, serious anomalies remain. It is saddening to realize that only a minority of the earth's inhabitants have benefitted much from this so-called progress; "so-called" because technology change appears often to have been associated with dislocation, destruction, or aggravation of misery. But even where the net benefit is clear, as in the case of certain advances in public health and medicine, the benefit tends to be distributed unequally between nations, classes, and individuals. The links between poverty, disease, and low productivity have been visible for a long time. Yet some of the scientifically advanced nations with abundant resources have failed to cope with poverty and its concomitants. Piecemeal attacks on disease, illiteracy, and ineffective agriculture have done little to improve the overall well-being of a population and examples of a large-scale integrated approach are rare. It is in this connection that the record of the People's Republic of China in the past quarter century is eminently worthy of

study and the publication of a bibliography on its experience in health care is timely.

The big hazard in this appraisal lies, of course, in the limitations of one's own cultural bias. Most of us usually rely unconsciously on a large cluster of culturally acquired assumptions, attitudes, and values that are hard to put aside in a strange setting where they may be quite irrelevant. Cross-cultural travel, reading, and friendships all help in promoting a more objective understanding of one's own blind spots as well as of "foreign" wisdom. Perhaps the best scholars in all disciplines use what certain philosophers and psychologists call the *phenomenological* approach — "an attitude of 'disciplined naiveté', the attempt to suspend all presuppositions (biases, implicit assumptions) and observe and describe the world of phenomena ... as it is naively apprehended."¹ To the extent that this approach is used when visiting the People's Republic of China or reading its reports, one is less likely to be "hung up" on such terms as political attitudes, continuing revolution, democracy, and Communist values. The phenomena behind the terms can be apprehended in their own context. Only then, I suggest, can the average Westerner venture tentatively to make value judgements on the principles involved, with some degree of objectivity.

It is with all humility, because I have not mastered the phenomenological approach, that the following comment is presented: an attempt to summarize the accomplishments of the People's Republic of China in the field of health, to speculate on the factors that contributed to the notable success of the effort, and to consider the question of how lessons to be learned from the Chinese experience may be applied in other settings. These impressions are based on the reading of many reports, an 18-day visit in the People's Republic of China, and countless discussions with interested individuals.² The summary of the

¹ MacLeod, Robert B. *Phenomenology*. In the *International Encyclopedia of Social Sciences*, New York, The MacMillan Company and The Free Press, 1968, 68-72.

² The reading was in connection with a study requested by IDRC's Director of Population and Health Sciences, Dr George F. Brown. The visit to the People's Republic of China in September 1973 was with a delegation from the Norman Bethune Memorial Committee of Canada on the invitation of the Friendship Association, Peking.

Chinese accomplishment is in harmony with nearly all of the reports of visitors to the People's Republic of China in the last 20 years. Many share the same interpretation of the factors that have contributed to that accomplishment. On what may be borrowed for use elsewhere, there is greater variation of opinion.

What are the accomplishments of the People's Republic of China affecting health?

1. Reduction or elimination of *communicable diseases* as major causes of disability or death, e.g., cholera, malaria, venereal disease, schistosomiasis, and tuberculosis.
2. Virtual elimination of many *natural disasters* — famine, serious malnutrition and deaths from floods — due primarily to progress in agriculture, irrigation, flood control, etc., but also in public health and education.
3. Universal primary and extensive secondary *education*, rapid progress in reduction of adult illiteracy, and *effective communication* with virtually the whole population by press, radio, or public loudspeaker. Healthful living is emphasized as one's civic responsibility.
4. Provision of an astounding system of *primary health care*, accessible to the total population of around 800 million and coordinated with a network of hospitals to provide care at secondary and tertiary levels. Associated with this has been the spectacular production of large numbers of various types of health personnel, particularly at the middle level.
5. Substantial development of clinical and developmental *research* with active reporting in new medical and scientific journals; innovative advance in medical technology and related concepts, e.g., treatment of burns, re-implantation of severed limbs, acupuncture analgesia, etc.
6. Apparent reduction of *population growth* by what may well be the most comprehensive and effective programme of family planning in the world. This has been accomplished without external assistance.
7. Virtually all visitors report extraordinarily *high morale* among the Chinese people. This appears to be widespread, transcending such differences of opinion as have arisen from time to time. The Liberation movement, which has emphasized compelling moral values and ethical attitudes, is associated with a genuine social renaissance. The morale achieved both contributes to and is enhanced

by the results of this mammoth popular movement.

Why have the efforts in health care been so effective and apparently acceptable?

1. The objectives of programmes in health have been subordinate to but in harmony with *basic social goals* adopted for the nation as a whole, e.g., a classless society in which social benefits are available to all; each contributes towards the common good; rewards take into account the individual's contribution as well as his needs; ingenuity, self-reliance, and self-sufficiency of the individual and the community are encouraged by incentives; progress in the rural sector must not be retarded by urban development.
2. Health programmes are planned and carried out in harmony with the prevailing *assumptions and expectations* of the bulk of the people. In the delivery of primary health care many traditional beliefs and folkways are utilized rather than overlooked or rejected. There is respect for established cultural patterns. An integration of both traditional and Western medicine is being attempted. It is intended that all approaches be evaluated.
3. At the same time, *innovation and experimentation* are encouraged in all circles of society — the use of new fertilizer and hybrid seeds by the farmer, the invention of new tools and procedures by the women in the housewives' factory, the synthesis of hormones in the biochemical laboratory. Mao's exhortations to "Weed through the old, bring forth the new" and to emulate "The foolish old man who removed the mountains" are taken seriously. The leader's parables are not only widely known but are seen as validated abundantly in general experience.
4. The system of health care is unusually flexible and adaptable to a variety of situations because of the Chinese blend of *decentralization, local autonomy*, and active *popular participation* at the grass-roots level. The objectives and general methods of a policy are determined and proclaimed by the central authority but the detailed approach is debated, decided upon, and carried out at the periphery. Although this makes for a frequently changing or kaleidoscopic variety of local arrangements, even within the same province or county, as in the collection of statistics or the training and expected roles of barefoot doctors, undoubtedly it elevates the level of

understanding and sense of responsibility of the citizenry throughout the nation. The effect on productivity must be enormous.

5. A major instrument in health programmes has been the *mass campaign* involving huge numbers of people of all ages through their organizations at levels of the county or commune, the factory or production brigade, the smaller teams, street committees, schools, etc. Apart from the effective obliteration of pests or completion of an immunization task in one mammoth effort, this approach gives insight into the problem at hand and is an invaluable experience in team work. It enhances confidence in the social principles and attitudes that the leadership would foster. This is strengthened further by the example of devoted participation in agriculture, industry, education, and other community activities by members of the People's Liberation Army.
6. Waste and confusion are minimized by a search for a *clear order of priority* among alternatives. Choices tend to be related faithfully to basic social goals and realistically to resources available and in the perspective of the current stage of development (national, regional, or local). The focus tends to be on urgent problems about which something conceivably can be done (by foreign standards, often inconceivably!). One gets an impression of the effect of good cost-benefit analysis, without visible arithmetic. Thoughtful attention to priorities accounts for such decisions as: (a) provision of primary health care for the bulk of people (80 percent rural) by way of part-time, auxiliary workers recruited locally and trained in rural centres by experienced physicians deployed from urban hospitals; (b) integration of preventive medical and public health measures with clinical activities, using generalist personnel in the main — hence, the barefoot doctor of the People's Republic of China is as much a teacher and sanitary worker as a practitioner of curative medicine and family planning; (c) secondary and tertiary care in hospitals has a focus on special problems, as in industry; and (d) laboratory and clinical research at present is related to the elucidation of promising efforts to improve diagnosis and treatment, e.g., acupuncture analgesia.
7. Effective use of the comprehensive or *multithrust attack* is exemplified well in schistosomiasis control and even better in *family planning*. The emancipation of women has

given them access to employment at full pay and to responsible roles in management and in the important committee structure of the factory or commune. Good care at the well-run day-care centre and school, at or near the place of work, relieves the mother of anxiety for her children. Small families are encouraged and mothers are "supposed to use planned birth to help China." Technical advice is abundant and contraceptives are free, as is abortion. Premarital and extramarital relationships are claimed to be rare. Postponement of age of marriage (for women, to 24-26 years; for men, to 26-29 years, less in rural regions) is urged as a contribution toward building up the country. Premarital continence is an old Chinese custom but deferral of marriage is new. The considerable success of the multifaceted approach raises the intriguing question: whence all this spirit of compliance and good will?

What is the source of the People's Republic of China's wisdom and strength?

1. When contemplating China's striking accomplishments in the past quarter century on many fronts, I found it difficult at times to differentiate confidently between (a) the effects of the Liberation movement, including its philosophy and its experience in guiding its own regime, and (b) the influence on a people of having belonged to our oldest continuous civilization, possessing obviously a rich store of accumulated competence and wisdom — intellectual, social, and technical. Despite tempestuous interludes, the Chinese have long had a deeply rooted tradition of individual self-discipline in deference to a respected group — family, clan, or party. Nevertheless, what we see now did not exist 100 or 1 000 or 3 000 years ago, even in China.
2. Apart from a complex of forces and events in Asia and beyond, which culminated in victory for the Liberation movement and its accession to power in 1949, the really distinctive element may well be China's present *socio-political philosophy* including special *ethical principles*. These were involved again and again in making many vital decisions leading to the policies and attitudes just described, especially during the Great Proletarian Cultural Revolution of 1966-70³. It is one thing

³ The greatest amount of change took place in 1966 and the immediately following years. Application of the fresh sharpening of ideas associated with the Cultural Revolution is still going on in 1974.

to place top priority, after defense of the realm, on providing *all* people with food, shelter, modest levels of education and health care, and a modest means of livelihood. For hundreds of millions, apparently the vast majority, this has meant decreasing shortages, increased purchasing power, but no inflation. Poverty and its consequences clearly are being conquered. It is another and much more radical thing to exhort everyone from early childhood to love and to care for one another, to practice a selfless devotion to one's tasks, and to subordinate all efforts in favour of "serving the people."

3. The goal, of course, is the old one of creating the New Man who sustains and is sustained by the New Society, and it takes time. Whether such idealism (using the word in the Western colloquial, not the Marxist philosophical sense) can survive in China is questioned by many outsiders and possibly by some insiders. Various implications have been challenged by critics, even with violence. But Mao warns that there will always be a tendency towards the "two lines of thought." Even in the New Society there may be selfish individuals seeking privilege, power, or possessions, requiring patient counselling and re-education. Above all, the leadership insists, the old spirit of elitism must not return: "Seek and accept criticism." Some Westerners create semantic difficulties when they extol what they see as a *religious* movement. In greater error, others fail to recognize in China's particular Communist movement the depth and sincerity of its ethical convictions, the zeal and dedication of its supporters, and the overwhelmingly widespread devotion to the leader. To discount the motivating force derived from the example of Mao's life story and the impact of his expressed thoughts on individuals, committees, and work teams as they seek solutions to a vast variety of problems, would be to distort the human perspective without which China's social and technological advance cannot be understood, much less transplanted to other settings.

Which elements in the Chinese experience are profitably transferable to other settings?

1. In the health field few if any components of Chinese experience of the past quarter century have been unique in conception. Most of the principles involved have been advocated for decades by organizations or consultants working internationally on problems of

health or community development. Most of the technical or administrative methods, acupuncture analgesia in surgery being one of the exceptions, have been used elsewhere, or even earlier in China itself, but seldom with comparable effectiveness or at such low cost. Surely the distinctiveness of the Chinese record today rests on the dynamic ensemble of its efforts, on the scale of their application and accomplishment and on the reasonable prospect of continuing progress. The *sine qua non*, as described in earlier paragraphs, seems to lie in the realm of social organization, mass motivation and morale — a combination not readily reproducible in the absence of an equivalent (not necessarily identical) cluster of interacting socio-political circumstances and historical forces. How one interprets the significance of this limitation and its manipulability should determine the nature of any efforts to transfer Chinese experience to other settings.

2. All would agree that the goals implicit in the seven Chinese accomplishments listed earlier should be primary objectives of health policy in any country seeking effective development in the face of massive needs and scanty resources. Control of the crippling infectious diseases and related malnutrition, which includes provision of a good water supply, is essential for maximum productivity, in agriculture as well as in industry. But it is also a major factor in swelling the rate of population growth. Therefore, reduction of communicable disease and malnutrition should be matched by an effective population policy. In Chinese experience, as indicated, this means much more than the utilization of contraceptives. How many nations are able or willing to mount such a multithrust attack?
3. Productivity is almost certainly enhanced by a suitable system of primary health care that is accessible to all workers and their families, rural as well as urban. The system's effectiveness depends upon the extent to which it succeeds in modifying the hygienic or sanitary behaviour of masses of people and meets their expectations for attention to their health problems as they see them. These twin efforts in education and support usually fail unless those who work directly with the people are capable of understanding them, winning their confidence, and animating them. Such a harmonious, constructive, two-way relationship would be difficult to achieve within the social and historical context of

many countries. Moreover, even when governments understand these more subtle requirements, they are often unable to recruit and support such personnel in sufficient numbers to cover the population. Too often the only people served are those living in and around the capital city and centres of major commerce, perhaps also some influential provincial towns. On the other hand, although the development is far from complete, the Chinese system of universal health care, which goes far in meeting these criteria, is not the result simply of following a blueprint worked out by foreign or even Chinese plan-

ners in health administration. Rather it is the outcome of a lengthy, indigenous, socio-political process, involving major and minor principles with a large degree of trial-and-error guidance in their application. Several of the ingredients most important to the Chinese have been listed. How many needy societies would be willing to consider them? If adopted as policy, could they be implemented and with what effect? In any case, an unprejudiced study of all the phenomena attending the Chinese effort to promote the well-being of their people should prove stimulating and rewarding.

J. WENDELL MACLEOD

Dr MacLeod is a Canadian physician with substantial experience in clinical practice and medical education and a long-time interest in the problems of provision of better health care in a variety of settings. After a decade as Dean of the expanded medical college at the University of Saskatchewan he organized and directed the secretariat of the Association of Canadian Medical Colleges as its first full-time executive officer. In the 1960's Dr MacLeod participated in organizing the Pan American Federation of Associations of Medical Faculties and the Third World Conference on Medical

Education in New Delhi, and as a member of the Technical Board of the Milbank Memorial Fund he was associated with its Faculty Fellowship Program in North and South America and the Caribbean. In the 1970's he served in Haiti for ten months as consultant in medical education for the Pan American Health Organization and has recently been an advisor to the Population and Health Sciences Division of the International Development Research Centre in Ottawa. He is Vice President of the Norman Bethune Memorial Committee of Canada.

I.1 Reference Works - General

See also: 078, 084, 218

- 001 American Consulate General, Hong Kong.** *Index to People's Republic of China Press, Selections from People's Republic of China Magazines, and Current Background.* Hong Kong, American Consulate General. Engl.

See entries 002, 003 and 004 for details on the actual publications.

This series of quarterly indices presents titles appearing in the *Survey of China Mainland Press*, *Selections from China Mainland Magazines*, and *Current Background*. It is published by the American Consulate General, Hong Kong. The index is broken down into topics such as Politics; Population; Social (Marriage, Family, Morals); Economics; Education; Public Health; Medicine; Foreign Relations; World Organizations; etc.

- 002 American Consulate General, Hong Kong.** *Survey of China Mainland Press.* Hong Kong, American Consulate General. Engl.

See entry 001 for index to this publication.

Survey of China Mainland Press is a weekly issue of some 200 pages. It features a daily (five days a week) selection from China mainland newspapers, translated into English by the American Consulate General, Hong Kong. Subjects included often deal with health and medicine. Subscriptions are available from: National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

- 003 American Consulate General, Hong Kong.** *Selections from China Mainland magazines.* Hong Kong, American Consulate General. Engl.

See entry 001 for index to this publication.

Selections from China Mainland Magazines features selected articles from nontechnical periodicals originating in the People's Republic. Articles on the subject of health and medicine are occasionally included. Selections have been translated from the original Chinese by the American Consulate General, Hong Kong. Issued monthly, this publication is available from: National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

- 004 American Consulate General, Hong Kong.** *Current background.* Hong Kong, American Consulate General. Engl.

See entry 001 for index to this publication.

Current Background is an irregular serial published by the National Technical Information Service, U.S. Department of Commerce. It is a compilation of translations from original Chinese articles of varying length concerning a particular subject, including health and medicine. The English translations are prepared by the American Consulate General in Hong Kong. Subscriptions are available from: National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

- 005 American Consulate General, Hong Kong.** *Current Scene: Developments in the People's Republic of China.* Hong Kong, Green Pagoda Press Ltd. Engl.

Current Scene publishes a variety of material concerning developments in the People's Republic of China. Included are original articles, brief reports from Chinese sources, translations of Chinese articles, reports on Chinese individuals from mainland news sources, and notes on events (such as trade delegations, meetings, etc.) taking place in the People's Republic. Published monthly in Hong Kong, the newsletter can be subscribed to in English, French, and Spanish at the following address: G.P.O. Box 66, 26 Garden Road, Hong Kong. Material published often deals with public health and medicine in China. A cumulative annual index is available.

- 006 Association of Research Libraries, Washington, D.C.** *Center for Chinese Research Materials Newsletter.* Washington, D.C., Center for Chinese Research Materials. Engl.

The *Newsletter of the Center for Chinese Research Materials* provides references, with abstracts, to original Chinese materials on a variety of subjects that are available at the Center. For example, one category of material dealt with in the Feb. 1973 issue number 12 is medicine. Forty-two different books, compendiums, handbooks, pamphlets, and microfilm in this category available at the Center are listed. The *Newsletter* is available from the Center for Chinese Research Materials, 1527 New Hampshire Ave., N.W., Washington, D.C., USA, 20036.

007 British Medical Journal, London. *Mao's medicine.* British Medical Journal (London), 3(5563), 19 Aug 1967, 449. Engl.

Concurrent with "the great proletarian cultural revolution" notable changes have taken place in the *Chinese Medical Journal*, published in Peking as the official voice of the Chinese Medical Association. From 1967 to 1969 the journal was entitled *China's Medicine*; most articles were of a political nature, with only two or three original articles appearing at the back. It was felt by British physicians in 1967 that this change in the content of the *Chinese Medical Journal* indicated that rational medicine was going through a difficult time in China.

008 Cheng, T.O., *Chinese Medical Journal vol.1, no.1, January 1973.* Journal of the American Medical Association (Chicago), 224(6), 7 May 1973, 899-900. Engl.
Letter to the editor.

The *Chinese Medical Journal*, official publication of the Chinese Medical Association, resumed publication in January 1973, following its suspension during the Cultural Revolution. The rebirth of this journal, and increasing physician exchanges, indicate that the barrier of isolation between China and North America is slowly being removed. The new *Chinese Medical Journal* differs from *China's Medicine* by the absence of heavy political overtones, and by its academic-scientific orientation.

009 Cheng, T.O., *New Chinese Medical Journal.* Annals of Internal Medicine (Philadelphia), 78(5), May 1973, 771. Engl.
Editorial Notes.

The new *Chinese Medical Journal*, reappearing in January 1973 after a lapse of several years, lacks the political flavour of its immediate predecessor *China's Medicine*. In the new journal, department or hospital names are mentioned rather than individual authors. The inaugural issue emphasizes such developments as coronary heart disease research, combined traditional and Western medicine, and severed limb reimplantation. Papers are prepared in a scholarly way with adequate documentation.

010 Cheng, T.O., *Future development of Chinese medical journals.* Annals of Internal Medicine (Philadelphia), 79(6), Dec 1973, 897-898. Engl.
Editorial. See also Appendix III.

Returning from a second visit to China the author reports that besides the *Chinese Medical Journal* the Chinese Medical Association will be publishing in the near future a *Chinese Journal of Internal Medicine* and a *Chinese Journal of Surgery*, both in Chinese to begin with. Indications are that after these are reissued, other journals published before the Cultural Revolution will also resume publication. A new journal called *Middle Grade Medical Bulletin* is expected to reappear. It was first published by the Chinese Medical Association in 1965 but publication ceased during the Cultural Revolution. The author notes that the Chinese are anxious for medical knowledge and that the Chinese Medical Association Library in Peking is replete with textbooks and medical journals both in Chinese and English.

011 Chinese Medical Association, Peking. *Chinese Medical Journal.* Peking, Chinese Medical Association. Engl. Chinese.

As indicated in Appendix II, the *Chinese Medical Journal* is the official publication of the Chinese Medical Association in Peking, and one of the few professional journals published in English for distribution outside China. During the period of June 1960 to December 1969, the journal ceased publication twice (from June 1960 to December 1961, and from January 1969 to December 1969), and changed its name twice (to *China's Medicine* in October 1966, and back to the *Chinese Medical Journal* in January 1973). The journal is now issued monthly, in Chinese with English abstracts for most but not all of the articles, and its contents provide excellent scientific information. The journal will be available in an English translation from Plenum Publishing Corporation; as of August 1974. Translations of subsequent issues of these journals are expected to be available within four to six months after the appearance of the original Chinese edition. The address of the Plenum Publishing Corporation is 227 West 17th Street, New York, N.Y. 10011.

012 Committee on Scholarly Communication with the People's Republic of China, National Academy of Sciences, Washington, D.C. *China Exchange Newsletter.* Washington, D.C., Committee on Scholarly Communication with the People's Republic of China, National Academy of Sciences. Engl.

The *China Exchange Newsletter* reports on scholarly exchanges between the People's Republic of China and Western countries in many areas of study. Medicine and health care are two of the areas covered. Information is provided on publications within and outside China, on research projects and exchange visits, addresses for correspondents in China, and so on. The publication is available from the Committee on Scholarly Communication with the People's Republic of China, National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418.

013 Contemporary China Institute, London. *China Quarterly*. London, Contemporary China Institute, School of Oriental and African Studies, London University. Engl. The *China Quarterly* is an international journal for the study of China, issued four times yearly. The journal features original papers and editorial reports, research notes, reports from China, book reviews, and political profiles. The subject scope includes all aspects of Chinese studies. Contributors to the journal are listed. Subscriptions are available from: Research Publications Ltd., Victoria Hall, East Greenwich, London SE10 0RF.

014 Fraser, S.E., Hsu, Kuang-liang., *Chinese education and society, a bibliographic guide: the Cultural Revolution and its aftermath*. White Plains, New York, International Arts and Sciences Press, 1972. 13p. Engl.

Material included in this bibliography is derived from English and Chinese-language sources as well as from Japanese, French, German and Italian publications. There are 14 sections with such headings as Elementary Education, Secondary Education, Higher Education, etc. Major English-language sources quoted are available in Hong Kong, Taiwan, the United States, and the People's Republic of China.

015 Hsinhua News Agency, Peking. *Hsinhua Weekly*. London, S. Chinque (publisher) and Hong Kong, Hsinhua News Agency. Engl.

This news bulletin is prepared in Peking by the International Liaison Department of the Hsinhua News Agency and is issued from Hong Kong and London both as a daily and a weekly publication. It occasionally carries items on health and medicine in the People's Republic of

China. Subscriptions are available from the publisher, S. Chinque, 76 Chancery Lane, London W.C.2, England.

016 Huard, P., Wong, Ming., *Bio-bibliographie de la medecine chinoise. (Bio-bibliography of Chinese medicine)*. Bulletin Societe des Etudes Indochinoises (Saigon), 31(3), 1956, 181-246. Fren.

This bibliography of Chinese medicine includes an index to principal authors (from the past 25 centuries), and an annotated title index, both compiled alphabetically. Separate indexes list authors by historical period and by subject matter. A brief bibliography of twentieth century work on China is included.

017 Ivy, R.H., *Notes on the Chinese Medical Journal and Ronald Y. Sung, D.D.S., M.D.* Plastic and Reconstructive Surgery (Baltimore), 44(4), Oct 1969, 391-392. Engl. Letter to the editor.

Commenting in 1969 on issues of the English language *Chinese Medical Journal* of Peking, the author points out the emphasis on ideological aspects of Chinese culture and the attribution of medicine's advanced status to the virtue and guidance of Mao Tse-tung. The author relates difficulties in contacting a former student who returned to Communist China as a surgeon after studying in the United States and expresses hopes that professional exchange between medical practitioners will be renewed.

018 John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Bibliography of Chinese sources on medicine and public health in the People's Republic of China: 1960-1970*. Washington, D.C., U.S. Department of Health, Education, and Welfare, DHEW Publication No. (NIH) 73-439, 1973. 486p. Engl.

This bibliography covers primarily those Chinese sources published between 1960 and 1970, translated from Chinese by the Joint Publications Research Service, U.S. Department of Commerce, and available at the Library of Congress. As mentioned in the introduction to the bibliography, "the People's Republic has probably published more journals and monographs on medicine and public health than on any other scientific discipline." The bibliography has two sections. One covers articles from medical journals, magazines, and newspapers under two broad categories — clinical and health related.

The other includes titles of books, monographs, and pamphlets on topics related to the bibliography. Health-related subjects of special interest in Part I are Public Health, Rural Health, Health Manpower Training, Paramedical Personnel, Traditional Medicine, and Hospital Service. In Part II, monographs of some interest include the areas of Public Health and Hygiene, and Traditional Medicine. See Appendix IV for further details.

- 019 Kao, F.F. ed.,** *American Journal of Chinese Medicine*. New Haven, Conn., Eastern Press. Engl.

The *American Journal of Chinese Medicine* publishes articles on a wide variety of topics such as translations of ancient texts and modern publications on Chinese medicine, experimental work and original papers, essays on delivery of health care in China, and case reports of patients treated with Chinese medicine. In issues published to date the subject matter has concentrated on acupuncture and other aspects of traditional Chinese medicine. It also contains information on forthcoming publications and meetings. The editor is Dr F.F. Kao, P.O. Box 555, Garden City, New York, N.Y., 11530, USA. The journal is issued biannually. References are listed at the end of some papers.

- 020 Kitson, J. ed.,** *Contemporary China Institute*, London. *Modern China Studies: International Bulletin*. London, Contemporary China Institute, School of Oriental and African Studies, London University, U.K. Engl.

The *Modern China Studies: International Bulletin* is a biannual bulletin of current post-graduate research, new research materials, conferences, and senior staff movements. One of the two bulletins is entitled *Current Post-Graduate Research* and lists, by subject of concentration, current research projects under the following headings: Anthropology and Sociology, Bibliography, Economics and Technology, Education and Technology, Education, Politics, Psychology, Science & Medicine, etc. Addresses of universities and institutions (world-wide) and an author index for the issue are included. The second of the bulletins, entitled *Newsletter*, reports on academic movements, conferences, new study centres and research programmes, and bibliographic materials. As in the above-mentioned issue of the bulletin, information on current post-graduate research is also included.

- 021 Kleinman, A.M.,** *Psychiatry in mainland China: additional sources*. *American Journal of Psychiatry* (Hanover, N.H.), 129(4), Oct 1972, 142-143. Engl.

Letter to the editor.

As a student of Chinese medical systems, and a man experienced in Chinese culture, the author directs us to important works that he feels will provide the best introductory background for visitors to China who are interested particularly in mental health. Full references are cited for the following categories: 1) traditional Chinese culture; 2) traditional Chinese medicine and psychiatry; 3) historical aspects of Chinese psychology; 4) development of Western medicine in China; 5) Chinese Communist perspectives; 6) modern research on Chinese medicine; 7) psychiatric illness and therapies; 8) medicine and psychiatry during the Cultural Revolution, and 9) comparative study of medical systems.

- 022 Lin, L.L.,** *Annotated bibliography*. In Wegman, M.E., Lin, T., Purcell, R.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 283-340. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

Material listed in this annotated bibliography on public health in the People's Republic of China falls under the headings of 1) historical material and visitors' reports; 2) disease control; 3) population planning; 4) nutrition and food; 5) health services organization and manpower. The period covered is from the establishment of the new regime in 1949 up to 1971.

- 023 Lindbeck, J.M.,** *Understanding China: an assessment of American scholarly resources*. New York, Praeger, 1971. 159p. Engl.

Valuable information for scholars of Sinology has been gathered, including data on the organization of this field, its growth in terms of numbers of active scholars and students, the increase of financial support of the field, etc. The author presents his views on needs and priorities for the future in Chinese studies.

- 024 Ma, J.T.,** *Sources of information: a brief survey*. In Wu, Y., ed., *China: a Handbook*, Newton Abbot, Devon, England, David and Charles Ltd., 1973, 759-776. Engl.

Some of the most helpful sources of information on mainland China are listed, beginning with a general discussion on the utilization of library resources and reference works. Publications are grouped under the following headings: Bibliographical Tools, U.S. Government Publications, Research Institutes and their publications, Foreign Publications, and Chinese Communist Publications. A selected bibliography of about 100 books and serials is included.

- 025 Nathan, A.J.,** *Modern China, 1840-1972: an introduction to sources and research aids.* Ann Arbor, Mich., Center for Chinese Studies, University of Michigan, Michigan Papers in Chinese Studies, No. 14, 1973. 95p. Engl.

This is an excellent first source for beginning any research on the People's Republic of China. The bibliography lists other bibliographies of reference works, source material and secondary works, etc. as well as major types of primary sources such as Chinese newspapers and radio, Chinese government publications, Chinese periodicals, and so on. All references to bibliographies and source materials are annotated in English. References to the following are of special interest: the guide to unpublished work and work in progress, Chinese newspapers, translation services (especially those emanating from the U.S. Consulate-General in Hong Kong — *Survey of China Mainland Press, Selections from China Mainland Magazines, and Current Background*). Radio monitoring services, Chinese periodicals, Japanese language sources, U.S. Archives, British Archives, and Russian language materials are well represented. Author and title indexes are provided.

- 026 National Committee on United States-China Relations, Inc.,** New York. *U.S.-China Relations: Notes from the National Committee.* New York, National Committee on United States-China Relations, Inc. Engl.

This newsletter, available from the National Committee on United States-China Relations, Inc., 777 United Nations Plaza, New York, New York 10017, frequently includes information on conferences, exchanges with China, new publications, and other developments either within China or abroad but related to the People's Republic of China. The China-related material often provides information on health and medicine.

- 027 Peking Review, Peking.** *Peking Review.* Peking Review (Peking). Engl. Fren. Span. The *Peking Review* is a publication of the People's Republic of China, with translations of articles from Chinese newspapers, magazines, etc., frequently covering topics in the field of health and medicine. This is a weekly publication with an annual subject index. Editions of the *Peking Review* are available in English, French, Spanish, Japanese, and German. The address for subscriptions is: *Peking Review*, Peking 37, China Post Office Registration No. 2-922, People's Republic of China.

- 028 Posner, A., de Keijzer, A.J. eds.** National Committee on United States-China Relations, Inc., New York. *China: a resource and curriculum guide.* Chicago, University of Chicago Press, 1973. 277p. Engl.

Written as a guide to resource material, this monograph is a useful handbook for teachers, students, and other persons interested in learning more about China. A wide range of materials in the following categories is listed: 1) teaching about China, and 2) teaching resources and curricula, including an annotated guide to audiovisual materials (films, filmstrips, slides, audiotapes, etc.), an annotated guide to books about China, resource centres for Asian studies, reports from conferences, etc. Included in the list of books about China are reference and source books, biographies, modern literature, first-hand impressions, economic studies, military studies, and books on China in world politics and United States-China relations. A variety of periodicals are listed including newsletters and association bulletins, publications of the People's Republic of China, and translations of PRC press and radio, scholarly journals, miscellaneous journals on Asia, monographs, and papers.

- 029 Robinson, T.W.,** Rand Corporation, Santa Monica, California. *China data retrieval: a method for computer-assisted indexing of translated mainland Chinese material.* Santa Monica, Rand Corporation, 1970. 214p. Engl.

This memorandum reports on a pilot project that applies computer techniques, a) to the construction of an index of materials translated from mainland China sources, and b) to estimating costs of production on a regular, large-scale basis. Appendices describe how to use the index, and include index lists by entry number and by subject category.

- 030 Sidel, V.W.,** *Chinese Medical Journal: to the Editor*. New England Journal of Medicine (Boston), 289(17), 25 Oct 1973, 925. Engl.

Letter to the editor, referring to T.K. Young's letter to the editor in New England Journal of Medicine, vol 289, p.111, 12 July 1973. See entry 035.

Sidel agrees with a statement made by T.K. Young that the *Chinese Medical Journal* suspended publication with its September 1966 issue; but he corrects the statement that its successor, *China's Medicine*, did not appear until 15 months later, to last for only one year. Sidel notes that the first issue of *China's Medicine* is dated October 1966 and the final issue is dated December 1968.

- 031 Skinner, G.W. ed.,** *Modern Chinese society: an analytical bibliography*. Stanford, Stanford University Press, 1973. 2300p. Engl.

Three centuries of scholarship on modern China has been organized into a three-volume reference work. Publications included are in Western languages (1644-1972), Chinese (1644-1969), and Japanese (1644-1971), and cover all disciplines. Over 150 pages in each volume are devoted to analytical indexes that classify works according to geographical coverage, historical period, local systems, i.e. the type of place viz. rural or urban, and author. Works are classified by topic rather than discipline. Thus a user seeking materials on a given topic may be led to works in half a dozen languages by scholars in two or more disciplines. Topics included are National Economy and Economic Planning, National and Higher Education, National Welfare and Living Standards, Modernization and Directed Social Change, Local Communities as Total Systems, Peasants, Workers, Socialization, Life Histories and Biographies, etc. There are 18 pages of references dealing with Illness and Medicine. Articles included in this section cover such areas as the practice of hygiene, traditional medicine, rural health, pharmacology, sanitation, midwife training, and so on. A far greater number of items related to population are listed under the categories of National Population, State Controls of the Populace, Regional and Local Population, Marriage and Family, Sex, Female Roles and Male-Female Differences, Reproduction, Fertility and Mortality. Each entry has been annotated by coding its contents

according to 1) subjects on which it has something of interest, 2) the historical period it is concerned with, 3) the geographic area it covers, 4) the type of place, i.e. urban or rural society it focusses on, and 5) the nature of its sources, whether primary or secondary.

- 032 Surveys and Research Corporation,** Washington, D.C. *Directory of selected scientific institutions in mainland China*. Stanford, California, Hoover Institution Press, 1970. 469p. Engl.

Prepared by Surveys and Research Corporation, for the National Science Foundation.

This comprehensive directory lists research and development institutions of mainland China, with indexes of institutions, scientists and other key personnel, major publications, and particular fields and sub-fields of research. In the medical sciences field there are references to cardiology, dermatology, nutrition, pharmacy, Chinese medicine, and so on.

- 033 Swe, T. ed.,** Association for Asian Studies, Inc., Ann Arbor, Michigan. *Bibliography of Asian Studies*. Ann Arbor, Michigan, University of Michigan, Association for Asian Studies. Engl.

The *Bibliography of Asian Studies* is issued yearly, with information for separate Asian countries listed under categories such as Economics, Education, Health and Welfare, Population, Acupuncture, Sociology, etc. As well as books on Asia, this bibliography selects articles from several hundred journals on Asia and many other journals with articles of interest to Asian scholars. Published under the editorship of Thein Swe, by the Association for Asian Studies, Inc., it is an annual publication of the *Journal of Asian Studies*. The G.K. Hall Company of Boston combined all the bibliographies published in the *Far Eastern Quarterly* and the *Journal of Asian Studies* between 1941 and 1965 as a *Cumulative Bibliography of Asian Studies, 1941-1965*. This book has two parts in eight volumes: four volumes of the author catalogue and four volumes of the subject catalogue, containing altogether over 100 000 entries for a period of 25 years. The supplementary *Cumulative Bibliography of Asian Studies, 1966-1970* appears in six volumes containing over 61 000 entries: three volumes of the subject catalogue, and three volumes of the author catalogue. Altogether 500 periodicals devoted to Asian Studies as well as 900 other periodicals of a more general nature

are scanned along with national bibliographies such as the *National Union Catalogues* and the *Library of Congress Printed Catalogue*. In the 1966-1970 subject bibliography, 395 pages are devoted to China. Two of the subsections in this part include Health and Welfare, and Science, Technology, Medicine and Public Health.

034 Union Research Institute, Ltd., Hong Kong. *Union Research Service*. Kowloon, Hong Kong, Union Research Institute, Ltd. Engl.

The Union Research Institute, Hong Kong, publishes a twice-weekly news supplement entitled *Union Research Service*. This includes articles extracted from various Chinese sources, including newspapers, periodicals, and radio broadcasts monitored by the Union Research Institute. Topics cover all aspects of Chinese life including medicine and health; for instance *Barefoot Doctors Treat Cases of Schistosomiasis, Five Thousand Western Doctors will Systematically Study*

Chinese Medicine this Year, etc. Articles vary in length from a few lines to ten pages.

035 Young, T.K., *Chinese Medical Journal*. New England Journal of Medicine (Boston), 289(2), 12 Jul 1973, 111. Engl.
Letter to the editor.

Commenting on the return to publication of the *Chinese Medical Journal* in January 1973, the author notes that the journal contains articles written in Chinese with selected abstracts in English. Tracing the journal's history, he states that following a stoppage of publication in 1966, its replacement, *China's Medicine*, did not appear until 15 months later and lasted only one year.

036 Yu, L.C., *Selected bibliography on recent developments in medicine and public health in the People's Republic of China*. American Journal of Public Health (Washington, D.C.), 64(4), Apr 1974, 406-408. Engl.

This bibliography comprises books and articles written by persons who have visited China since 1960. The material is of general interest to medical/public health personnel.

I.2 Reference Works - Population

See also: 031, 497, 527

- 037 Bell, B.Z.**, East-West Centre, Honolulu. *Annotated bibliography of materials on the population of the People's Republic of China in the resource materials collection of the East-West Population Institute as of June 1972*. Honolulu, East-West Centre, 1972. 66p. Engl.

This annotated bibliography is designed as a guide for those who wish to research the field of population and family planning in the People's Republic of China. Most of the materials concentrate on the post-1949 period. Topics covered are population statistics (censuses), population dynamics (fertility, mortality, migration), population and resources (food), and population policy (family planning, marriage, contraception).

- 038 Carolina Population Center, University of North Carolina, Chapel Hill.** *China*. Chapel Hill, N.C., Carolina Population Center, 1974. 20p. Engl.
Automated retrieval bibliography No. 138, 1 March 1974.

This automated retrieval bibliography lists information available from the Carolina Population Center, University of North Carolina, on population and family planning in the People's Republic of China. Sources include periodicals, books, published and unpublished documents. Author, subject, and country indexes are provided for the 140 entries.

- 039 Driver, E.D.**, *China*. In Driver, E.D., *World Population Policy: an Annotated Bibliography*, Lexington, Mass., Lexington Books, 1972, 562-586. Engl.

This annotated bibliography devotes 24 pages of references to mainland China's population policy. The sources quoted are primarily Western in

origin and cover such topics as Population, Production and Birth Control, Population Controls in China, Social Policy in China, and so on.

- 040 Lyle, K.C., Lyle, E.R.**, *Bibliography of birth control in China*. n.p., n.d. 18p. Engl.
Unpublished document.

This *Bibliography of Birth Control in China* covers sociological and medical literature, including books; chapters of books, conference papers, and journal articles, augmented by a small number of important titles from Chinese sources (mostly newspaper articles). Subject categories under the People's Republic of China are General Aspects, Population Policy, Programs and Services, and Newspaper Articles. The body of the bibliography is arranged alphabetically by single or senior author and date of publication. Journal articles are identified by volume number, pagination, and date of issue. (Author abstract.)

- 041 Orleans, L.A.**, *Family planning developments in China, 1960-1966: abstracts from medical journals*. Studies in Family Planning (New York), 4(8), Aug 1973, 197-215. Engl.

Abstracts are presented for virtually all articles dealing with abortion, sterilization, contraceptive devices, and related subjects that appeared in medical journals in the People's Republic between 1960 and 1966, and that are available in the United States. (Journal abstract.)

- 042 U.S. Bureau of the Census, Washington, D.C.** *Population and manpower of China: an annotated bibliography*. Washington, D.C., U.S. Government Printing Office, International Population Statistics Reports Series P-90, No.8, 1958. 132p. Engl.

This annotated bibliography of publications on demographic and manpower questions in the People's Republic of China includes compilations of statistical data issued by the Japanese during their occupation of China from 1931 to 1945. Of the 646 books, articles, official reports, etc. that are listed, approximately two-thirds are in English and the rest are in Chinese, Japanese, and other languages.

I.3 Reference Works - Acupuncture

See also: 019

- 043 John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md.** *Acupuncture and moxibustion*. In *Bibliography of Chinese Sources on Medicine and Public Health in the People's Republic of China: 1960-1970*, Washington, D.C., U.S. DHEW Publication No (NIH) 73-439, 1973, 1-19. Engl.
See also entry 018.

Articles on acupuncture and moxibustion taken from Chinese journals and newspapers, translated by the Joint Publications Research Service, U.S. Dept. of Commerce, are listed. Specific aspects include use of acupuncture in anaesthesia

and surgery, infectious diseases, obstetrics and gynecology, parasitic diseases, and so on.

- 044 Tam, B.K., Tam, M.S.**, *Acupuncture: an international bibliography*. Metuchen, N.J., Scarecrow Press, 1973. 137p. Engl.

This bibliography is a comprehensive source of published material on acupuncture. Books, journal articles, and various other sources are included, grouped according to areas of medical specialization, such as anaesthesia, dentistry, infectious diseases, etc.

- 045 Yu, L.C.**, *Selected bibliography on acupuncture*. Ann Arbor, Michigan, University of Michigan, School of Public Health, Spring 1973. 3p. Engl.
Unpublished document.

This brief bibliography deals primarily with the topics of acupuncture and the use of acupuncture anaesthesia in China.

II History of Medicine

See also: 067, 146, 178, 243, 282, 301, 364

- 046 Agren, H.,** *Patterns of tradition and modernity in contemporary Chinese medicine.* Uppsala, Uppsala University, Nov 1973. 26p. Engl.

To be published in the Proceedings of a "Conference on the Comparative Study of Traditional and Modern Medicine in Chinese Societies", The University of Washington, Seattle, Feb 4-6, 1974.

Having given a brief outline of the philosophical and historical framework of traditional Chinese medicine, the author delves into its modern transformation, which culminated in official government sanction in 1949. By 1955 acupuncture was a required subject of study at higher Western style medical schools, and the Research Institute for Chinese Medicine was founded. In the late 1950's active interest in traditional medicine was favoured. By 1961, however, priority was given to scientific reporting on theoretical and applied research of international standard. The flow of papers on traditional medical subjects in the journals of Western medicine recurred to some extent in 1965-1966 but not with its former intensity. With the Cultural Revolution, the relations between the two schools of medicine were re-evaluated on a political basis and traditional medicine was designated as valuable in bringing medical care to the agricultural villages. The author lists a number of textbooks published in China between 1970 and 1973 that illustrate the "new medicine." Two of these are texts intended for use in courses in traditional medicine; the others demonstrate, within the framework of Western medicine, to what high degree the two medical systems are used side by side in clinical practice. In the field of research, investigations of international quality have been made on the neurophysiologic correlate of acupuncture analgesia. Recent Japanese studies of Chinese traditional medicine have attempted among other things to "objectivize" the traditional diagnostic system. References are listed at the end of the paper.

- 047 Bauer, G.E.,** *Medicine without frontiers: the peripatetic physician.* Medical Journal

of Australia (Sydney), 2(16), 18 Oct 1969, 785-788. Engl.

A brief discussion of the history of medicine includes ancient Babylonia, India, and China. China's well-documented traditional medicine, and some procedures of traditional diagnosis and treatment are mentioned.

- 048 Beau, G.,** *Chinese medicine.* New York, Avon Books, May 1972. 175p. Engl.

This book thoroughly discusses the history of Chinese medicine, the principles of acupuncture and other healing methods, Chinese pharmacopoeia, Chinese medicine in the modern world, and traditional medicine in modern China. In describing the recent status of traditional medicine, the author points out that in 1949 there were 15 000 modern doctors in China and 500 000 traditional ones; as of 1965, the latter number remained more or less constant, but the former has risen to 135 000. Many Chinese doctors with modern training know how to practice acupuncture and moxibustion. In 1954, the first institute for scientific research in traditional medicine was created in Peking, and research has been carried on since that time.

- 049 Bowers, J.Z.,** *Chung-i: Chinese traditional medicine.* Asia (New York), 5, Spring 1966, 62-69. Engl.

Chinese traditional medicine (Chung-i) has been reaffirmed by the Communist government; students attending medical schools study Western medicine and traditional medicine. Techniques of Chung-i include acupuncture (insertion of needles in the skin) and moxibustion (application of burning moss to the skin). Earliest contact with Western medicine came from Jesuit missionaries in the 16th century. A barrier in its development was the opposition to anatomical dissection. Traditional practitioners rely on questioning, inspection, and palpation for diagnosis. China was the last major country in the world to accept Western medicine. The Peking Union Medical College, developed by the Rockefeller Foundation, was for a time the leading medical school in the world. Now called the Chinese Union Medical College, it holds a dominant position in medical education and research in China. Recent visitors report striking advances in health and sanitation. The present goal of uniting Western medicine with traditional medicine seems reasonable in view of the shortage of Western-trained physicians and the people's attachment

to traditional medicine. It is doubted that Western medicine will replace Chung-i even when adequate numbers of Western-trained physicians become available.

- 050 Bridgman, R.F.,** *L'interet d'une etude comparee de la philosophie et de la medecine chinoises. (Benefit of a comparative study of philosophy and Chinese medicine).* Proceedings of the International Congress of Orientalists, Leiden, Netherlands, E.J. Brill, (2), 1951, 287-294. Fren.

This paper examines China's most influential texts of traditional medicine, and their place in the history of medicine.

- 051 Bridgman, R.F.,** National Library of Medicine, Baltimore, Md. Josiah Macy, Jr. Foundation, New York. *Traditional Chinese medicine.* In Bowers, J.Z., Purcell, E.F., eds., *Medicine and Society in China*, New York, Josiah Macy, Jr. Foundaion, 1974, 1-21. Engl.

General discussion follows on pp. 37-40.

This paper presents a survey of the historical development of Chinese medicine from the first dynasties, circa 2 000 B.C., to the 17th century. Ample references to original Chinese texts are quoted. The main lines of the classical system of medicine are traced, including an analysis of hygiene and prevention. Health organization and the influence of Chinese medicine in other empires are discussed.

- 052 Cazort, R.J.,** *Traditional medicine in the People's Republic of China.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 17. Engl.

Traditional medicine in China includes the use of herbs, animal products, minerals, and acupuncture; it is now taught in conjunction with Western medicine. Medical education includes assigning students to work with the peasants in the countryside and with workers in the factory, as well as exposure to the "barefoot doctors" with their practical training, and exposure to traditional Chinese physicians. Although Chinese traditional medicine dwindled with the expansion of Western medicine, after 1949 it was once again fostered, and is now part of the curriculum of the medical schools. All clinics and hospitals visited had both kinds of doctors. Traditional doctors now receive some basic scientific training.

- 053 Chamfrault, A.,** *Traite de medecine chinoise. Vols. I-VI. (Treatise on Chinese medicine). Vols. I-VI.* Angouleme, Coquemard, 1964. 986p. Fren.

Chamfrault's *Traite de medecine chinoise (Treatise on Chinese Medicine)* is published as six volumes. These are: I. *Acupuncture, Moxas, Massages, Saignees (Acupuncture, Moxibustion, Massage, Bleeding)*, 986 p., 1964; II. *Les livres sacres de medecine chinoise (The Sacred Books of Chinese Medicine)*, 574 p., 1957; III. *Pharmacopée (Pharmacopoeia)*, 320 p., 1959; IV. *Formules magistrales (Authoritative (Pharmaceutical) Recipes)*, 252 p., 1961; V. *De l'astronomie a la medecine chinoise (Astronomy in Chinese Medicine)*, 342 p., 1963; VI. *L'energetique humaine en medecine Chinoise (Human Energetics in Chinese Medicine)*, 464 p., 1969.

- 054 Chamfrault, A.,** *Quelques verites revolutionnaires sur la medecine chinoise. (Revolutionary truths about Chinese medicine).* France-Asie (Tokyo), 11, Sep 1955, 127-135. Fren.

The philosophical basis of traditional Chinese medicine, and the practice of acupuncture are discussed, pointing out that research that can shed some scientific understanding on this interesting subject will be of great value in modern therapy.

- 055 Cheng, Jay Chi Cheong.,** *Psychiatry in traditional Chinese medicine.* Canadian Psychiatric Association Journal (Ottawa), 15(4), Aug 1970, 399-401. Engl.

Two streams of thought have merged in traditional Chinese medicine; one naturalistic, the other animistic. Basic concepts of the naturalistic stream were as follows: the concept of Tao, the concept of Yin and Yang, the concept of the five elements, and the concept of significant numbers. Disease or ill-health was explained in terms of transgression of Tao, imbalance of Yin and Yang, or disequilibrium of the five elements, although external causes were also thought of as etiological factors. The second stream, based on folklore, was probably derived from the ancient concept of animism and the practice of spirit worship. Diseases were attributed to possession by spirits and were treated through supernatural means. The author outlines the appearance in ancient Chinese records of nervous and mental diseases, and the first mention of hospitals for the insane, circa 300 B.C. Methods of examination followed the usual observation and verbal

elicitation of clinical history. Techniques of treatment were acupuncture, moxibustion, medicines, and exercises. The preventative aspects of health care were stressed, emphasis being placed on personal hygiene, nutritious diet, and the right exercises, but above all on the importance of being in harmony with nature.

- 056 Chou, Erh-fu.,** *Dr. Bethune, our true friend.* China Reconstructs (Peking), 8, Nov 1959, 26-28. Engl.

This brief biographical sketch of Norman Bethune reveals the great admiration the Chinese have for his devotion to the people and to the communist government. His medical work with the Eighth Route Army prior to Liberation is highly praised.

- 057 Chu, Hsi-ying.,** *Chinese traditional medicine.* Sante Publique (Bucharest), 9, 1966, 91-93. Engl.

Chinese traditional medicine has its own special theoretical basis recorded in scholarly texts, which includes disease prevention and treatment. More than 1 000 drugs derived from plant, animal, and mineral sources are known. Government policy accords equal status in hospitals to traditional practitioners, encourages Western-style physicians to study traditional medicine, and has initiated research into the indigenous pharmacopeia.

- 058 Croizier, R.C.,** *Traditional medicine in modern China: science, nationalism, and the tensions of cultural change.* Cambridge, Mass., Harvard University Press, 1968. 325p. Engl.

This monograph on traditional medicine in modern China is divided into three broad categories. Part one discusses the history of the traditional Chinese medical system and the introduction and growth of modern medicine in China, 1800-1949. Part two discusses medicine as a cultural and intellectual issue between 1895 and 1949. Part three deals with the Communist rehabilitation of Chinese medicine, and the place of old medicine in the new society. References are listed at the end of the monograph.

- 059 Croizier, R.C.,** *Chinese medicine in the twentieth century intellectual revolution: the tensions of cultural choice.* Ph.D thesis, Berkeley, University of California, 1965. 298p. Engl.

This thesis on Chinese medicine of the twentieth century discusses traditional medicine, the development of modern medicine from 1800-1949, the emergence of medicine as an area of national concern, and the modern controversy in mainland China over traditional medicine.

- 060 Croizier, R.C.,** *Medicine, modernization, and cultural crisis in China and India.* Comparative Studies in Society and History (New York), 12(3), Jul 1970, 275-291. Engl.

Pre-scientific systems of medicine find strong support among the pro-scientific modernizing elite of both China and India. Reasons for this situation are traced, noting that traditional China and India developed well-integrated medical systems with a sophisticated theoretical basis, preserved in a formal literary tradition, which has had to contend with a foreign intruder on its own soil. There has been a broadly similar pattern in the development of the movements for Chinese medicine and for Ayurveda, the traditional medicine of India. The old-style physicians first set up the cry to save medicine from hostile intentions of government bodies, and once traditional medicine had found a home within each country's nationalist movement (circa 1920) there began a movement toward the integration of traditional and Western medicine. Whereas in India modern medicine continues to hold a favoured position against native medicine, in post-1949 China traditional medicine has been given entirely equal status. Cultural nationalism infuses the native medicine movements in both China and India; they have both attempted to find science in their own respective medical tradition.

- 061 Dimond, E.G.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Scientific basis for traditional medicine.* In Topics of Study Interest in Chinese Medicine and Public Health: Report of a Planning Meeting, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH)72-395, 1972. Engl. Planning meeting on topics of study interest in Chinese medicine and public health, Bethesda, Md., Mar. 15, 1972.

Commenting on traditional medicine in the People's Republic of China, E.G. Dimond relates observations of the use of herbal medicines in treatment of rheumatic fever and appendicitis, and reports that cancer experts have found that

certain herbs will aid nutrition in the presence of cancer. Thyroid disease is operated upon, almost entirely (99 percent) with acupuncture anaesthesia, although no scientific explanation of analgesic mechanism is known. Basic research is being done at the teaching hospital in Peking.

- 062 Dimond, E.G.,** *Acupuncture anesthesia: western medicine and Chinese traditional medicine.* Journal of the American Medical Association (Chicago), 218(10), 6 Dec 1971, 1558-1563. Engl.

Coordination of Western medicine with traditional Chinese medicine (pulse feeling, tongue observation, herbal remedies, acupuncture, etc.) is carried out at all levels of China's health care system. For instance, in hospitals, diagnosis is based on Western methods and therapy is a full combination of both schools. Applied clinical pharmaceutical research now going on in China has an immense potential. Traditional acupuncture (insertion of needles at strategic points defined rigidly by 2 000 year old texts) has been developed recently by relating to new points of insertion, deeper placement, and constant manipulation of the needle. Therapeutic acupuncture is widely used in China, in close association with Western scientific methods. Acupuncture anaesthesia, as observed in operations and discussed with Western-trained Chinese physicians, has been accepted by modern-trained physicians and is considered by them as a definite advance. A suggested explanation of the effectiveness of acupuncture anaesthesia is the existence of a neural pathway.

- 063 Griggs, A.,** *Chinese herbal treatment: a science under siege.* Race Relations Reporter (Nashville, Tenn.), 4, May 1973, 19-22. Engl.

The awakening interest of Westerners in traditional Chinese medicine and herbology, and the acceptance of these practitioners in the United States is discussed.

- 064 Hodges, P.C.,** *History of medicine in China.* Medicine on the Midway (Chicago), 27(2), Fall 1972, 2-7. Engl.

The development of Chinese medicine through the ages, the advent of Western medicine in China and its influence in this century are discussed, with particular reference to the Peking Union Medical College. In mainland China traditional Chinese medicine has been given equal status with Western medicine, and although Western medicine suffered a setback, there

should still be a place for physicians, surgeons, and teachers of high quality. Nineteen references are listed at the end of the paper.

- 065 Hoeppli, R.,** *Malaria in Chinese medicine.* Sinologica (Basel, Switzerland), 4(2), 1955, 91-101. Engl.

The existence of malaria in ancient China, as evidenced by references in traditional medical texts, is discussed. Traditional methods of treatment included acupuncture, moxibustion, massage, and herbal, animal, and mineral remedies.

- 066 Hoosenally, S.,** *Chinese folk medicine.* Orientations (Hong Kong), Jun 1971, 38-39. Engl.

Modern practitioners of Chinese medicine emphasize scientific principles, although their methods cannot compare with those of Western doctors. Diagnostic methods, patient interviews, prescriptions, and specialization in traditional medicine are discussed. Most mainland hospitals have a department of traditional medicine, including acupuncturists. Some mention is made of the effectiveness of herbal, mineral, and animal-derived medicines.

- 067 Horn, J.S.,** *Marriage of East and West.* In Horn, J.S., *Away With All Pests: an English Surgeon in People's China 1954-1969*, New York, Monthly Review Press, 1969, Engl.

When the Communists took power in China in 1949, there were far more traditional doctors (about 400 000) than Western doctors. Traditional Chinese medicine has a documented history dating from around 480 B.C. The art of ancient medicine was to ascertain where the equivalent of Yin and Yang had been lost, and then restore it to normal by medication or acupuncture. The theory of the five elements and their interactions provide the theoretical basis for acupuncture therapy. Diseases are diagnosed by listening to the patient's complaints, observing his appearance, and feeling the pulse. A vast pharmacopeia of herbs, minerals, and animal products became a part of traditional Chinese medicine. Mao Tse-tung, in calling for the union of all medical workers, established the same rights and status for traditional doctors, who work side by side with modern physicians. Modern methods are available to traditional doctors, and students of Western medicine follow some courses on traditional medicine. Research has concentrated on analyzing and testing traditional remedies, and on methods of blending traditional and modern

medicine with the object of evolving a new type of medicine. As an example of integration of traditional and modern methods, the author relates his personal experiences in the treatment of fractures. The policy of uniting the two schools of medicine is benefitting the Chinese people and will enrich medical science.

- 068 Huard, P.,** *Quelques aspects de la doctrine classique de la medecine chinoise. (Aspects of the classical doctrine of Chinese medicine).* Biologie Medicale (Paris), 46, Jun 1957, 1-119. Fren.

Special issue.

This treatise outlines the philosophical-theoretical aspects of traditional Chinese medicine.

- 069 Huard, P., Wong, Ming.,** *Chinese medicine.* London, Weidenfeld and Nicolson, 1968. 256p. Engl.

Translated from the French by Bernard Fielding.

In this detailed analysis of Chinese medicine special attention is given to the history of its development, comparisons with the medicine of Europe and of other Asian countries, the influence and present status of Western medicine in modern China, and the practice of traditional medicine in modern China. References are listed at the end of the paper.

- 070 Huard, P., Wong, Ming.,** *Medecine chinoise au cours des siecles. (Chinese medicine through the ages).* Paris, Les Editions R. Dacosta, 1959. 190p. Fren.

The history of medicine in China is described with detailed reference to famous physicians, the medical literature, medicinal plants, government policy toward physicians, and physician education.

- 071 Huard, P., Wong, Ming.,** *La medecine chinoise. (Chinese medicine).* Paris, Presses Universitaires de France, 1964. 125p. Fren.

This is a concise text dealing with the following aspects of Chinese medicine: the history of traditional medicine from 2 000 B.C. to 1960 A.D., and traditional medicine in modern China.

- 072 Huard, P., Wong, Ming.,** *Evolution de la matiere medicale chinoise. (Evolution of Chinese materia medica).* Janus, vol.47, Leiden, E.J. Brill, 1958. 67p. Fren.

This treatise on the historical evolution of traditional Chinese medicine outlines developments of the medical literature from 1 500 B.C. to 1912 A.D. There is also a discussion of the connections between Chinese medical literature and that of other Eurasian countries.

- 073 Huard, P.,** *Inter-reactions de la medecine traditionnelle et de la medecine occidentale en Chine. (Inter-reactions of traditional medicine and Western medicine in China).* Concours Medical (Paris), 6(4), 1957, 1695-1698. Fren.

In the People's Republic of China, modern physicians and traditional practitioners are practicing their own types of medicine side by side. The author briefly sketches the aspects of acupuncture and moxibustion that have been incorporated with modern medicine in China.

- 074 Huard, P.,** *Livres medicaux chinois. (Chinese medical books).* Aesculape (Paris), 39, Oct 1956, 25-64. Fren.

The author describes various characteristics of Chinese medical texts, such as the typographic characteristics, the nature of illustrations, etc. There is also some discussion of ancient treatises on sexuality, and the custom of binding women's feet.

- 075 Hubotter, F.,** *Chinesische medizin. (Chinese medicine).* CIBA Zeitschrift (Wehr, Baden), 8(94), 1959, 3109-3140. German.

Chinese medicine is discussed under the following headings: 1) time-table of Chinese medicine, 2) history of China, 3) Chinese anatomy and physiology, 4) Chinese diagnosis and therapy, and 5) famous Chinese physicians. 1) Time-table of Chinese medicine briefly reviews the progress and innovations that have taken place in Chinese medicine, from about 2 800 B.C. up to the arrival of the first European surgeons and physicians around 1800 A.D. 2) History of China is reviewed (excluding medical aspects) going back to the almost-human Peking men about half a million years ago and concluding with the foundation of the People's Republic of China, in 1949. 3) Chinese anatomy and physiology maintained the complementary principle of Yin and Yang. This philosophical principle was applied to man. It is shown that the ancient texts on anatomy and physiology were more metaphysical than scientific in nature. 4) Chinese diagnosis was based chiefly on examination of the pulse and inspection of the tongue. Therapy included use of herbal drugs and acupuncture. Modern

acupuncture and its anaesthetic properties are systematically investigated at the present time at the Institute for Acupuncture and Moxibustion, founded in Peking in 1951. 5) Several famous Chinese physicians, their lives and activities are described. Pien Ch'io, who lived in the 6th or 5th century B.C., was a wandering physician, who had great success in healing the sick. Chang Chung-ching who lived in the late Han period around 200 A.D., is called the Chinese Hippocrates, and was a great pharmacobotanist. These are only two of several presented by the author. A selected bibliography is included. Notes on the theme include 1) a brief description of the pharmacological properties of ginseng (*Panax schin-seng*) and 2) a description of the beginnings of European medicine in China with the battles against cholera and smallpox (introduction of Jenner's vaccine) representing the highlights of that period. References are listed at the end of the paper.

- 076 Ibragimov, F.I., Ibragimova, V.S., *Principal remedies of Chinese medicine*.** Moscow, Gosudarstvennoye Izdatel'stvo Meditsinskoy Literatury Medgiz, 1960. 411p. Engl.

Unedited rough draft translation, prepared by the Translation Division, Foreign Technology Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, U.S.A.

This treatise on traditional Chinese medicine describes in detail the following: basic tenets of Chinese medicine, the selection, drying and storage of medicinal plants, the characteristic properties of medicinal plants and their application in Chinese medicine, some remedies of animal and mineral origin, comprehensive utilization of medicinal plants and other remedies, and examples of prescriptions.

- 077 Kamae, S., (*History and present status of Chinese medicine*).** Japanese Journal of Nursing (Tokyo), 32(12), Nov 1968, 64-65. Japanese.

In 1 200 B.C., medicine in China was identical with shamanistic witchcraft. Yet accessory tools such as medicinal herbs, sharp stone fragments, and needles announced further typical developments. During this period some medical practices and theory were also recorded. Between 1 500 and 200 B.C., economic and social progress as well as the Yin-Yang nature philosophy gave rise to the true birth of Chinese medicine. The inexhaustible classics still referred to today were

written around 150 A.D. No great new progress was made after this period; on the contrary Chinese medicine gradually began to lose its original characteristics. Chinese medicine was eventually introduced in Japan where it soon flourished. Japan developed its own brand of Chinese medicine and around 900 A.D., was not inferior to China in this field. With Vesalius' studies of anatomy and with the later discovery of cell-pathology, Western medicine and Chinese medicine took completely different courses. Chinese medicine had become self-complacent and at the end of the 19th century could compete less and less with the positive medicine introduced from the West. It was conservative and lacked precision. Chinese medicine came to be despised as ignorant and superstitious. After the Muji restoration (1868), the Japanese medical society opted for Western medicine. Chinese medicine, however, has its merits. It does not interfere with the internal structure of the body. It treats man as a human being and is interested in nothing else but healing. It uses only natural objects such as herbs, and treats people one by one, endeavouring to know the patient personally.

- 078 Koran, L.M., *Psychiatry in mainland China: history and recent status*.** American Journal of Psychiatry (Hanover, N.H.), 128(8), Feb 1972, 84-92. Engl.

The author summarizes the English language literature on ancient, modern, and recent Chinese psychiatry for psychiatrists travelling to mainland China and others interested in cross-cultural psychiatry. Practices and beliefs regarding the etiology, diagnosis, and treatment of mental illness are described, together with manpower and facilities, professional publications, and research directions. The article concludes with a suggested outline for data gathering by travellers interested in psychiatry in mainland China. (Journal abstract.)

- 079 Lee, Tsung-ying., *Synthesizing Chinese and Western medicine*.** Eastern Horizon (Hong Kong), 8(6), 1969, 33-37. Engl.

Rather than being a stop-gap measure, China's development of traditional Chinese medicine alongside modern Western-type medicine is intended to produce a new medical science uniting the two.

- 080 Masunaga, S., *Diagnosis and treatment in oriental medicine*.** Psychologia (Kyoto, Japan), 12, 1969, 74-80. Engl.

What is called Oriental medicine in Japan today is based on the medicine that was organized in China 2 000 years ago during the Han dynasty. Oriental medicine includes herbal remedies, and surface medical treatments such as acupuncture, moxibustion, and massage. Philosophical aspects and treatment methods, including psychotherapy, are discussed.

- 081 MD of Canada, Montreal.** *China: world's oldest continuous culture.* MD of Canada (Montreal), 12(7), Jul 1971, 59-74. Engl.

In a survey of China's complex history the following is noted about medicine in modern China: 1) in communes and clinics, Western medicine and traditional Chinese therapies are practiced together, and the two systems have been merged in the Chinese Medical Association since 1954; 2) acupuncture is widely used; 3) herbal medicines are still used; 4) a pharmaceutical industry is being built up; 5) physician-patient ratio is about 1:10 000 for Western-trained practitioners and about 1:900 for traditional physicians; 6) overall physician shortage has led to reliance on paramedical personnel particularly in rural communities (i.e. barefoot doctors who administer some medicines, give vaccinations, teach birth control methods, etc.); 7) education of physicians at lower level district medical schools averages two to three years; 8) mass health campaigns have eliminated cholera, malaria, venereal disease, expanded obstetric and pediatric care, and cut the death rate in half during the last 20 years.

- 082 Miltner, L.J.,** *Letter to the editor.* Journal of Bone and Joint Surgery (Boston), 55A(1), Jan 1973, 213-214. Engl.
Letter to the editor.

The history of international cooperation in medicine between the USA and mainland China is outlined. The author discusses Peking Union Medical College particularly with reference to orthopaedic work.

- 083 Needham, J.,** *China and the origin of qualifying examinations in medicine.* In Needham, J., *Clerks and Craftsmen in China and the West*, Cambridge, Cambridge University Press, 1970, 379-395. Engl.

This historical treatise examines China and the origins of qualifying examinations in medicine. Attention is given to developments in the national medical administration, in medical colleges, in teaching, and in the status of physicians from the first century B.C.

- 084 Needham, J.,** *Science and civilization in China.* Cambridge, Cambridge University Press, 1971. Engl.

This extensive study of China has been published in four volumes: vol.I, *Introductory Orientation*; vol.II, *History of Scientific Thought*; vol.III, *Mathematics and the Sciences of the Heavens and the Earth*; vol.IV(1), *Physics and Physical Technology: Physics*; IV(2), *Mechanical Engineering*; IV(3), *Civil Engineering*. Indexes are provided in each volume. Volumes V, *Chemistry and Industrial Chemistry*; VI, *Biology, Agriculture and Medicine*; and VII, *Social Background*, are in preparation. As indicated in the introduction to vol.IV(3), volume VI will deal with the biological and medical aspects of China, including botany, zoology, agricultural arts, institutes of medicine, history of medicine, and pharmaceuticals. References to Chinese, Japanese, and Western-language books are listed at the end of each volume.

- 085 Needham, J., Lu, Gwei-djen.,** *Hygiene and preventive medicine in ancient China.* Journal of the History of Medicine and Allied Sciences (New Haven), 17, 1962, 429-478. Engl.

In that China today is trying to recover and validate what was of value in their medical heritage, and systematically examining the contribution of traditional medicine in the hopes of integrating them into a modern medical science, the observations offered in this article on hygiene and preventive medicine in ancient China are of some interest. References are listed at the end of the paper.

- 086 Nguyen-Van-Quan.,** *Medecine chinoise. (Chinese medicine).* France-Asie (Tokyo), 10, Aug 1954, 1049-1054. Fren.

This article notes that China's traditional medicine, with a history as old as its people, is scientific by Western terms only in its therapeutic aspects. It is derived from the philosophy of Yin and Yang, which explains the phenomenon of the universe in terms of two opposing forces. The application of this philosophy in Chinese traditional medicine is discussed.

- 087 Okawa, K.,** *(Short history of health care in China).* Hokenfu Zasshi (Japanese Journal for Public Health Nurses) (Tokyo), 28(9), Sep 1972, 665-668. Japanese.

Modern Western medicine was introduced in China by Alexander Pearson. The missionaries built many hospitals and welfare institutions. In

the early 19th century there were both Protestant and Catholic medical and welfare institutions; the Protestants worked mainly at developing social work, education, and medicine, whereas the Catholics placed the stress on orphanages and homes for the aged. From 1927 through 1936, the central government promoted work in hygiene and this began to yield some results. Regulations concerning medicine were gradually enforced; the qualifications of medical doctors and nurses were checked and diplomas granted. With respect to pharmaceutical policy, the central government controlled and authorized the medicines. Regulations about narcotics were set in 1929 and revised in 1931. The policy with regard to epidemics was to send specially trained medical crews to eradicate these diseases. By 1937 medicine in China was showing fast progress. Many medical schools were established successively. In 1934, 4 928 doctors had graduated from foreign-run schools. There were 136 schools for obstetricians and 174 for nurses. The Ministry of Public Health was established. Between 1932 and 1937, 733 public health trainees completed their courses. Many medical surveys were also conducted on a large scale everywhere in China and detailed death statistics also were published.

088 Orbach, M., *Medical services in China.* Hospital (London), Jun 1958, 388-392. Engl.

Chinese medicine, during its 3 000 year old record, has developed pulse-taking as a diagnostic method, prescribed clinical treatment for fever and other diseases, developed surgery and anaesthesia, as well as collecting extensive writings on materia medica, much of which has contributed significantly to modern medical science. The Communist Party in China accepts the traditional doctors as an important part of their medical manpower. Traditional physicians and Western-trained doctors have been united into a joint programme. The absorption of traditional medicine into the stream of modern medicine will be a lengthy but rewarding task for medical science.

089 Palos, S., *Chinese art of healing.* New York, Herder and Herder, 1963. 235p. Engl.

This comprehensive book on Chinese medicine concentrates on traditional methods of healing, which can stand up to scientific criticism, with some mention of more superstitious practices. An historical/philosophical look at traditional

medical practices is followed by illustrated descriptions of acupuncture techniques, moxibustion, and respiratory therapy. Statistical data on patients treated by respiratory therapy are quoted demonstrating a great degree of success against disorders of the respiratory and digestive systems. Remedial massage methods and physiotherapy exercises are illustrated. Traditional medicaments of vegetable and animal origin are briefly described. For each therapeutic method, the author indicates modern scientific research being undertaken.

090 Porkert, M., *Die energetische terminologie in den Chinesischen medizinklassikern.* (*Energetic terminology in the Chinese medical classics*). Sinologica (Basel), 8(4), 1965, 184-210. German.

A total of 112 energetic key terms found in the Chinese medical classics are explained and defined. A list of these terms in the original Chinese is appended. Interpretation of the terms shows that in old China, medicine in the first instance was an applied science or technique, with even the most general terms having specific meanings arrived at by convention. In the medico-technical context, these special terms have been translated always using far more analytical European terms, with fatal consequences for the exact understanding of the texts. It is shown that even the very simple terms cannot be "translated" by a single European term.

091 Quijada Cerda, O.A., *Medicina tradicional China.* (*Traditional Chinese medicine*). In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 85-100. Span.

See also entry 324.

Three thousand years ago, Chinese physicians were already putting the emphasis on preventive medicine, to the extent that fees paid them would stop when the individual became ill. Chinese traditional medicine considered physical health as dependent on spiritual factors; the restoration of physical health would not be undertaken without attending to the psychological condition of the patient. Cases of mental illness were medically recorded during the Han dynasty (206-209 A.D.). Physical fitness played an important part in the preservation of health. The Chinese conduct their therapeutics, more than any other country, by herbal medicine and other natural drugs. A department of the Medical Research Institute is exclusively devoted to research of indigenous prescriptions.

- 092 Rechung, Rinpoche., Jampal, Kunzang.,** *Tibetan medicine.* Berkeley, University of California Press, 1973. 340p. Engl.

This comprehensive treatise on Tibetan medicine is primarily a translation of the biography of the court physician to a king of Tibet during the 8th century A.D. In addition to this large section of translated material there is a brief history of Tibetan medicine, and a brief account of the "Commentary on the b-Shadrgyud (Lapislazuli Rosary)".

- 093 Rosner, E.,** *Medizinisches gedankengut in der chinesischen "kameralistischen" literatur.* (Medical thought in Chinese cameralistic literature). In Brull, L., and Kemper, U., eds., *Asien: tradition und fortschritt*, Wiesbaden, Otto, Harrassowitz, 1971, 494-501. German.

A study of the major codifications of the Chinese laws, like the Huang-Ming ching-shih wen-pien of the Ming period (1368-1644), compiled by Ch'en Tzu-lung in 1638, and the Huang-ch'ao ching-shih wen-pien of the Ch'ing period (1644-1911), compiled by Ho Chiang-ling in 1827, shows that the direction of both the national economy and various socio-political aspects of Chinese life were frequently based on ideas and approaches used by physicians in the treatment of human ills, i.e. economic situations were compared to individuals affected by fevers or other pathological conditions. Examples dealing with disaster aid, construction of dams along the Yellow River, etc. are presented. It is concluded that the ethical standards and modes of behavior of the ancient Chinese physicians were of high quality permitting their application to the direction of national affairs.

- 094 Shu, E.H.,** *Developmental history of medicine in China and the review of medical progress in America and Russia.* Seattle, Greenland Co., 1963. 285p (English) 127p (Chinese). Engl. Chinese.

This historical development of medicine in China from ancient to modern times is outlined. Medical schools are listed, and the medical situation of mainland China (as of 1962) is described with reference to government policy, epidemiology, nutrition research, sanitation, manufacture of pharmaceuticals, and medical education. Also reviewed is medical progress in America and Russia.

- 095 Sidel, V.W., Sidel, R.,** *Integration of traditional and modern medicine.* In Sidel, V.W.,

Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 127-155. Engl.

Following Liberation in China attempts were made to integrate the work of doctors trained in traditional and Western medicine, and these efforts have been intensified since the Cultural Revolution. Herb medicine and research being conducted on these herbs at the Institute of Materia Medica in Peking are discussed. Traditional treatment methods such as moxibustion, massage, exercise, and acupuncture and the use of acupuncture as an analgesic in surgery are described. It is pointed out that acupuncture's effectiveness is quite evident, although a scientific explanation is not.

- 096 Svehla, M.D.,** (Report on a study trip to the Chinese People's Republic from March 4, to May 7, 1966.) *Casopis Lekarů Ceských* (Journal of Czech Physicians), (Prague), 105, 9 Aug 1966, 895-899. Czech.

One purpose of a trip to China in 1966 was the study of acupuncture in a methodical way in order to assess its efficiency and to consider the possibility of its application in Czechoslovakia. It has long been used by the Chinese in cases of headaches, lethargies, convulsions, colics, etc. Acupuncture is a cure that goes back to neolithic times. From the point of view of practical application it has some advantages: 1) in some diseased conditions it has an expressive and fast effect, 2) the methods are simple, cheap, and easy to perform anywhere, 3) it may serve as an effective means of first aid, 4) it has few outspoken contra-indications. Mechanical effects of acupuncture and moxibustion are not clear. From a practical point of view acupuncture and moxibustion may be effective, if the right spot of application can be chosen. Cures by acupuncture and moxibustion could be an appropriate complement to the skills of Western-trained physicians. The cure functions only if it is carried out systematically and for that reason fundamental methodical schooling would be needed before physicians could practice the art of acupuncture and moxibustion.

- 097 Szczesniak, B.,** *John Floyer and Chinese medicine.* Osiris (Belgium), 11, 1954, 127-156. Engl.

This essay, of some historical interest, describes the work of John Floyer, an English physician of the early 18th century who emphasized the achievements of ancient Chinese medicine

claiming that they could not be surpassed by modern learning. Floyer's interest in the pulse as a method of medical examination, based on ancient treatises from Chinese medicine, was recorded in his book *The Physician's Pulse Watch*. Other aspects of his interest adopted from the Chinese included a portable apothecary, folk remedies, and conceptions of anatomy. Floyer's research and practice of "ancient" Chinese medicine resulted in the modern invention of the pulse-watch and modern advances in medical examination.

- 098 Taylor, C.E., Leslie, C.,** *Asian medical systems: a symposium on the role of comparative sociology in improving health care*. Social Science and Medicine (Oxford), 7, 1973, 307-318. Engl.

Analyses of traditional medicine, as practiced in India and China, are theoretically important for medical sociology and relevant to the problems of improving medical care. Possible areas of research and ways of making this research useful in improving medical care in Asian countries are discussed. The issue of implementation is primarily determined by political considerations. Problems such as who from among the many categories of practitioners could be used to improve governmental health services, and educational programmes for traditional practitioners are mentioned. Discussion follows. References are listed at the end of the paper.

- 099 Toyama, P.M., Nishizawa, M.,** *Physiological basis of acupuncture theory*. Journal of the National Medical Association (New York), 64(5), Sep 1972, 397-402. Engl.

Acupuncture is an ancient Chinese therapy to treat disorders of internal organs through needle stimulation of the body surfaces. It appears that acupuncture is most effective for the treatment of functional disorders of internal organs. The beneficial effect of acupuncture appears to be due to its effect on the adjustment of function of the autonomic nervous system and the endocrine system as well. In effect, it seems to act to restore the body's natural defenses against stresses. Widespread use of acupuncture anaesthesia in major surgery in China is a relatively recent development. The physiological basis for acupuncture anaesthesia is not clearly understood at the present time. However, electronic inhibition and/or hormonal inhibition theories are proposed. Significant contributions made by Western investigators to the understanding of the

physiological basis of acupuncture are reviewed. (Author abstract.)

- 100 Veith, I.,** *Yellow emperor's classic of internal medicine*. Los Angeles, University of California Press, 1966. 260p. Engl.

Translation of "Huang ti nei ching su wen" with an introductory study by Ilza Veith.

Regarded as the most influential work in existence, this book constitutes the basis of Chinese and Japanese orthodox medicine in China. Included are treatises on the philosophical foundations of traditional Chinese medicine, physiology, diagnosis, and therapeutic concepts.

- 101 Veith, I.,** *Psychiatric thought in Chinese medicine*. Journal of the History of Medicine and Allied Sciences, Inc. (New Haven), Jul 1955, 261-268. Engl.

Ancient Chinese sources are examined for traces of indigenous thought on mental health and mental healing.

- 102 Wallnofer, H., Von Rottauscher, A.,** *Der goldene schatz der Chinesischen medizin. (Golden treasure of Chinese medicine)*. Stuttgart, Schuler Verlagsgesellschaft, 1959. 173p. German.

This historical review of Chinese medicine discusses its fundamental aspects (the Tao, the correlates, Yin and Yang, etc.), its development (the Yellow Emperor, Huang-Ti, the book *Nei Ching*; famous physicians and famous medical works), medicinal herbs, drugs and love potions (including a detailed list of prescriptions dealing with ginseng, various medicinal herbs, opium, and animal, human, and mineral "drugs"), Chinese anatomy and physiology (meridians of acupuncture), Chinese pathology (views on how diseases come into being; the land and the climate; etc.), and Chinese methods of treatment (acupuncture and the restoration of the equilibrium of the bodily functions by means of acupuncture, and modern methods of therapy; the practice of moxibustion or moxa treatment; massages; exercises to prolong life, etc.). This work does not deal with any aspects of modern Chinese medicine. Twenty references to Chinese sources and thirty-four references to Western sources are listed at the end of the paper.

- 103 Wallnofer, H., Von Rottauscher, A.,** *Chinese folk medicine*. New York, Bell, 1965. 184p. Engl.

Translated by Marion Palmedo.

The following aspects of Chinese folk medicine are discussed: philosophical basis, historical evolution, medicinal plants, anatomy, methods of treatment, etc.

- 104 Wong, Ming.,** *Contribution a l'histoire du developpement de la matiere medicale en Chine. (Contribution to the history of the development of materia medica in China).* Rennes, France, University of Rennes, 1957. 261p. Fren.

Doctoral thesis presented at the University of Rennes. Unpublished document.

This thesis discusses 1) the place of materia medica in Chinese medicine, 2) connections between materia medica and alchemy, dietetics, botany, and agriculture, 3) pharmaceuticals, 4) therapeutic methods, and 5) the historical development of traditional medicine. The second part of the paper is devoted to a biography and bibliography of Li Che-tchuén (1518-1593) and an analysis of the script *Pen-ts'ao kang-mow*.

III Disease Control

See also: 065, 266, 273

- 105 Allen, E.J.,** *Disease control in China: an investigation into the ways in which public health propaganda effects changes in medicine and hygiene with emphasis on schistosomiasis control.* New York, Columbia University, 1965. 89p. Engl.

Paper prepared in partial fulfilment of the Bachelor of Arts degree, Columbia University.

This study is concerned with ways in which information gathered by China's public health officials and agencies is translated into effective public health programmes. It is directed at the methods of fundamental education in public health and hygiene that provide the catalyst for effecting cognitive changes in the peasantry. The example of the study is propaganda work in schistosomiasis control. First the author examines the state of distributional and epidemiological knowledge and the extent of local public health centres that are able to collect information about disease prevalence and to effect public health programmes on a local level. He then considers the theoretical problems dealing with how a public health programme is made acceptable to the rural peasantry. The ways that public health work in China exemplify the models presented in Chapter II occupy the succeeding discussion. An investigation into the strengths and weaknesses of public health propaganda in China emphasizes the means whereby a directing agent makes its desires known to the element to be changed (the rural peasantry who are affected by schistosomiasis), and devises methods through which these changes are effected. In centering on fundamental education and propaganda, this study focusses on preventive aspects of control and the development of public awareness. (From author's preface.)

- 106 Andreano, R.L.,** University of Wisconsin, Madison. *Schistosomiasis in the People's Republic of China: some public health and economic aspects.* Madison, Wisc., Health Economics Research Center, HERC research reports series, No. 03, 1972. 44p. Engl.

See also entry 107.

This paper discusses the situation as of 1958 in the People's Republic of China with respect to schistosomiasis control. In assessing the seriousness of the problem in China, reported prevalence rates are examined, treatment methods discussed, and the conclusion drawn that the degree of success achieved in schistosomiasis control is somewhat problematical. It is suggested that the key variable in spreading the area of infection and population at risk was irrigation and water conservancy construction, and that if this premise is correct, the degree of success in control cannot be as great as has been thought by Western observers.

- 107 Andreano, R.L.,** University of Wisconsin, Madison. *More on the god of plague: schistosomiasis in Mainland China.* Madison, Wisc., Health Economics Research Center, HERC research reports series, No.7, 1972. 13p. Engl.

For abstract see entry 106.

- 108 Cheng, Tien-hsi.,** *Disease control and prevention in China.* Asia (New York), 26, Summer 1972, 31-59. Engl.

Also appears in Wegman, M.E., Lin, T., and Purcell, E.F., eds., *Public Health in the People's Republic of China*, Josiah Macy, Jr. Foundation, New York, 1973, 185-207. See entry 368.

This is a report concerned with the major programmes instituted in China for control and prevention of parasitic diseases, cancer, and mental disorders. The author first reviews highlights of the anti-schistosomiasis programme, which involved prevention and treatment stations, medical teams of specialized personnel, and research in institutions and hospitals. Mass media and door-to-door demonstrations were used to win support of the people, and resulted in a nationwide mass movement. Environmental sanitation projects have proved effective, but personal protection has been a weak phase of the campaign. Treatment of schistosomiasis japonica infection is based on the combined use of traditional Chinese and Western remedies. Treatment is coordinated with regular farm activities, and does not burden the peasants financially. Delivery of medical care in rural areas relies increasingly on "barefoot doctors," part-time medical workers mostly concerned with such endemic diseases as

schistosomiasis, malaria, measles, and pneumonia, as well as enforcement of disease control measures, such as disinfecting drinking water. Today barefoot doctors provide the bulk of basic medical care in rural districts; they constitute an ingenious health care delivery organization. Scientists have achieved excellence in some clinical and basic phases of cancer control. In certain areas China reached or even surpassed international levels. Traditional Chinese medicine is actively used in cancer treatment. Still, China remains behind world standards in its quantity of cancer work. In mental disease control, the objectives are coordination of inpatient and outpatient services, concentration on prevention, and less reliance on medicinal treatment. Psychotherapy stresses active participation by the mentally ill. New treatments allow a combination of Western and traditional Chinese practices and China appears to be making progress in the control of mental disease.

- 109 Cheng, Tien-hsi.,** *Schistosomiasis in mainland China: a review of research and control programs since 1949.* American Journal of Tropical Medicine and Hygiene (Baltimore), 20(1), Jan 1971, 26-53. Engl.

This article is based on a review of about 250 published reports, largely in Chinese biomedical journals, on interviews with Chinese expatriates and Japanese scientists, and on news reports from communist, noncommunist, and neutral sources. It relates the progress made toward the control of schistosomiasis in mainland China during the past 20 years. In 1949, as a result of more than a half century of neglect of the public health, central China was ravaged by schistosomiasis japonica. In 11 provinces comprising 324 districts and some of the best rice-growing lands, villages were abandoned, fields lay fallow, famine was rife, and the surviving population was ill. Surveys showed that about 10.5 million persons had schistosomiasis and another 100 million were exposed constantly to the danger of infection; also, 1.5 million cattle were infected. A national campaign against the disease utilized the abundant manpower to destroy the snail host by cleaning irrigation ditches and streams and to reclaim lands by earth fills. Preventive measures have included storage of human faeces to destroy eggs. Treatment of patients has relied upon traditional galenic drugs and a three-day treatment with tartar emetic, with a maximum dosage of 700 mg. Research has produced a series of nitrofurantoin compounds, some of which have given promising results. There is little doubt that

great progress has been made toward the control of schistosomiasis in China. Recently, owing at least in part to the Cultural Revolution, a seven-year plan to eradicate schistosomiasis has fallen behind schedule. (Journal abstract.)

- 110 China Reconstructs, Peking.** *First county to wipe out schistosomiasis.* China Reconstructs (Peking), 17, Jul 1968, 12-16. Engl.

The Revolutionary Committee of Yukiang county has taken vigorous action against schistosomiasis, which was formerly endemic in that population. Initial measures include widely publicizing directives for health work and building up local morale. In every township, one or two medical groups were set up to treat sick peasants. The formation of agricultural cooperatives in the countryside provided better conditions for treatment. Methods of destroying snails, the intermediate host of the schistosomes, involved constructing new ditches and filling in the old ones, and applying chemicals in low-lying areas. Simultaneously, the management of water sources and manure, and building of new wells quite effectively prevented new infections. Through short-term courses and a system of apprenticeship, health experts have trained workers in schistosomiasis prevention. In all villages and mountain districts, peasants are examined once a year for schistosomes.

- 111 Felsenfeld, O., John E. Fogarty** International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Epidemiology of infectious and parasitic diseases.* In Topics of Study Interest in Chinese Medicine and Public Health: Report of a Planning Meeting, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH)72-395, 1972. Engl.

Planning meeting on topics of study interest in Chinese medicine and public health, Bethesda, Md., Mar. 15, 1972.

Commenting on infectious and parasitic diseases in China, the author notes that plague may still be endemic in North China, that there have been two outbreaks of cholera in 1962 and during the Cultural Revolution, and that typhoid fever still persists. Little is known in the West about parasitic diseases; the presence of malaria is denied by Chinese authorities, but schistosomiasis appears to remain a menace. A shift from quality to quantity in epidemiological work is taking place in China. The value of mobile paramedical teams is worthy of study.

- 112 **Horn, J.S.,** *Death to the snails.* In Horn, J.S., *Away With All Pests: an English Surgeon in People's China 1954-1969*, New York, Monthly Review Press, 1969, 94-106. Engl.

It appears that by using the combined medical-political approach, similar to that employed in the eradication of syphilis, China will bring schistosomiasis under control. China's emphasis on prevention has been on two fronts: 1) preventing contamination of waterways by treating all human faeces (as well as that of oxen and cattle) so as to destroy schistosome eggs; 2) destruction of snails. To carry out this second strategy, the peasantry were educated in the nature of the illness and its method of transmission, and then turned out en masse to drain rivers and ditches, dig away the banks and tramp down the earth. Following preventive measures, case-finding is very important, relying on faeces-testing twice annually. Treatment is the weak link, with drug therapy producing unpleasant side effects and often proving insufficient without surgery as well. The planning and organization of the campaign are discussed. Anecdotes, as related by villagers to the author, record the past ravages of uncontrolled schistosomiasis in the countryside and the brighter aspect of village life since mass campaigns against this disease were initiated.

- 113 **Horn, J.S.,** *Conquest of syphilis.* In Horn, J.S., *Away With All Pests: an English Surgeon in People's China 1954-1969*, New York, Monthly Review Press, 1969. Engl.

The history of venereal disease in China is traced from 1504 when it was introduced into Canton by colonialists, to remain linked with drugs and prostitution until Liberation in 1949. Presently, through the combined medical-political approach of Mao Tse-tung, venereal disease has been completely eradicated from most areas and completely controlled throughout China. The battle against syphilis was won on a political front, the campaign relying on establishment of a socialist system that ended exploitation and that encouraged all workers to serve the people. Prostitution disappeared, women's legal status was made equal with that of men, and poverty was eliminated. Mass campaigns, the mobilization of thousands of paramedical workers, development of new methods of case-finding (involving propaganda and questionnaire distribution), and active treatment methods are described.

- 114 **Huang, Kun-yen.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Infectious and parasitic diseases.* In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education and Welfare, DHEW Publication No. (NIH) 73-67, 1973, 241-64. Engl.

Evidence is abundant that many infectious diseases, parasitic and nonparasitic, have been brought under control in mainland China; for instance, cholera and smallpox have been wiped out. The author provides a general picture of ten infectious diseases as they exist in China with specific emphasis placed on distribution and prevalence, research, and specific control measures. Those diseases included are tuberculosis, leprosy, trachoma, viral encephalitis, schistosomiasis, malaria, filariasis, onchocerciasis, paragonimiasis, and ancylostomiasis. Sixty-seven references are listed at the end of the paper.

- 115 **Komiya, Y.,** *Recommendatory note for the control problem of schistosomiasis in China.* Japanese Journal of Medical Science and Biology (Tokyo), 10, 1957, 461-471. Engl.

A team of Japanese experts makes recommendations resulting from a survey for schistosomiasis control in several endemic areas of China and notes that in 1957 more medical personnel were engaged in treatment than in prevention. Problems of patient treatment, diagnosis, snail control, and night-soil treatment are discussed. Physio-chemical control of vector snails and environmental control methods are described in some detail.

- 116 **Ling, Yang.,** *End to plague.* Peking Review (Peking), (5), 2 Feb 1960, 19-20. Engl.

Following Liberation, the elimination of schistosomiasis was included as an important goal in China's National Programme for Agricultural Development. A huge campaign was initiated, involving elimination of snails, a night-soil control system, wearing of protective clothing in infected waters, and medical treatment of disease victims. It is claimed that schistosomiasis had been completely brought under control by 1960.

- 117 **Ma, Hai-teh.,** *Wiping out disease by mass action.* China Reconstructs (Peking), 8, Aug 1959, 9-11. Engl.

Mass participation in health work has resulted in eliminating or controlling the major diseases formerly endemic in Kiangsi province of southern China. The campaign was organized like a military operation, beginning with a conference attended by commune leaders, Red Cross volunteers, students, hygiene workers, midwives, traditional practitioners and so on. Half of the delegates were given an intensive 2-day training course in propaganda work and brief explanations of how the diseases were contracted and identification of their main symptoms. Questionnaires for each disease were distributed to these persons for use in the communes and urban residences. The other half of the delegates were mainly nonmedical people, given a seven-day course on how to diagnose, examine, and treat cases. These health workers returned to their native places to take part in the campaign. The political trainees prepared the way for the medical trainees by mobilizing the people through discussion and distribution of the questionnaires. It was found that the trainees made correct diagnoses in 91.2 percent of the cases of leprosy, 89.7 percent of syphilis, and nearly 100 percent of ringworm. Work was so successful that the Ministry of Health called a national on-the-spot conference attended by top health officers, to popularize the methods used. Epidemiologically it was proven that the eradication methods used were as effective as any known and more economical in terms of personnel and funds required.

- 118 McDermott, W., Stead, E.A., Jr.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Pattern of disease.* In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 50-68. Engl.

Based on observations made in the People's Republic of China, an attempt is made to portray the disease pattern of the Chinese population. The pattern of disease in the hospital population aged between 20 and 50 did not differ from that of the United States except for the absence of trauma, alcoholism, drug addiction, and regional differences in the type of tumours. Systems of inoculations and birth control seem to work well but the follow-up and treatment of chronic illness were not good. Health stations and clinics had very limited diagnostic facilities; in provincial hospitals and teaching hospitals, the facilities were better and adequate medical records available. The medical education and nurse

training systems are in a state of flux. The youthfulness of the population is evident in both rural and urban areas. The author estimates a rural infant mortality rate of 35 to 40 per 1 000 live births, and an urban figure of 25 to 35 per 1 000. These reduced infant mortality rates were accomplished by reeducating traditional midwives, improving the external environment, and changing practices in the home. It is estimated that the birth rate is still quite high, above 30 per 1 000 population, in the countryside, whereas it may be as low as 20 in the city. This would mean an annual population increase of about 2 percent. The disease pattern has to be predominantly one of the disease of infants, children, and youths. The pneumonia/diarrhea syndrome is numerically the most important of all diseases during the first year of life. Schistosomiasis represents a major disease against which progress has been made. The transmission of tuberculosis is still occurring. The pattern of adult diseases indicates that hypertension is prominent, and there is a great interest in coronary heart disease. In conclusion, it is stated the overall disease pattern is similar to that of the U.S. four decades ago. In health, the Chinese are at an intermediate stage of development.

- 119 Nelson, G.S.,** *Immunological control of schistosomiasis.* British Medical Journal (London), 4(5833), 21 Oct 1972, 172. Engl.

Replying to an article on schistosomiasis control, the author points out that a great deal of the Chinese literature before 1966 is premature and politically oriented and that in the three years after 1966 the control programme was in disarray. The author believes that many of the techniques of snail control used in China would be deleterious rather than beneficial in Africa. An educated and highly motivated populace, without scientific research cannot eradicate snails from swamps, rivers, and lakes in endemic areas. As there are no prospects of totally eliminating the snail hosts from endemic areas, studies in more effective means of immunological control should be sought.

- 120 Peking Review, Peking.** *Large scale mass movement of preventing snail fever in southern China.* Peking Review (Peking), 13(13), 27 Mar 1970, 11-12. Engl.

Through the combined efforts of peasants and medical workers, more than three million Chinese people had been cured of schistosomiasis by 1970, and three million square meters of land had been freed of snails. The whole campaign

produced increasingly effective results since the Cultural Revolution. In areas where it has been eradicated, checkups are conducted at fixed intervals. In areas that were once disease-ridden, the people's physical strength has improved. As of 1970, a new upsurge in the mass movement to eradicate the disease in southern China was in progress, integrated with large-scale water conservancy construction.

- 121 Rogozin, I.I., Mikhailov, I.F.,** *Advances in epidemiology in the Chinese People's Republic.* Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii (Journal of Microbiology, Epidemiology and Immunology), (Moscow), 30(10), 1959, 1-7. Engl.

This report discusses special achievements in public health anti-epidemic measures, ten years after the beginning of Communist rule in China. In 1950 the Anti-Epidemic Board was set up within the Ministry of Health; mobile anti-epidemic teams were created and public health and epidemiological stations were set up in the large towns and counties. Active participation of the masses has been an essential element of the anti-epidemiological service. In 1956 the government's target became destruction of the "four evils" (rats, sparrows, flies, and mosquitoes) within twelve years, thus hopefully eliminating smallpox, plague, schistosomiasis, etc. Village improvement, the development of hygienic personal habits, and anti-epidemic measures have resulted in a nationwide fall in the figures for typhoid, malaria, schistosomiasis, kala-azar, and so on. Examples are given as proof of advances being made by the health service of China.

- 122 Snapper, I.,** *Chinese lessons to Western medicine: a contribution to geographical medicine from the clinics of Peking Union Medical College.* New York, Grune and Stratton, 1965. 416p. Engl.

The fact that certain diseases reflect the character of the social and economic as well as the geographic environment is clearly illustrated in this monograph. Many case histories of patients brought to the Peking Union Medical College and treated by the author prior to 1941 are presented as lessons for the Western clinician. Clinical aspects of the following areas are dealt with: infectious diseases, tuberculosis, cardiovascular diseases, etc.

- 123 Stott, R., Bethell, H.,** *Immunological control of schistosomiasis.* British Medical Journal (London), 4(5831), 7 Oct 1972, 49. Engl.

In response to the article entitled *Immunological Control of Schistosomiasis*, British Medical Journal, August 1972, the authors of this letter to the editor state that an immediately applicable solution to the problem of schistosomiasis control (snail control in particular) is not impossible. They state that schistosomiasis has ceased to be a serious nuisance in China, as a result of educating everyone in the life style of the snail and nature of the disease. Community participation in mass campaigns against snails included temporary drainage of canals, rivers, etc., chemical controls, and faecal examinations. Elimination of this disease is possible if people are encouraged to effect their own cures.

- 124 Stott, R.,** *New medical care.* China Now (London), (36), Nov 1973, 12-14. Engl.

The author begins with an account of health problems facing the People's Republic of China at Liberation in 1949. The present health system, which emerged after the Cultural Revolution, is outlined. Details are given of the work of rural clinics manned by barefoot doctors; the street or commune hospitals in the city or rural areas, respectively; district hospitals; and major urban hospitals, which form the apex of the medical core pyramid and are responsible for most sophisticated medical problems. Traditional and Western medicines are practiced simultaneously in all these units, and mobile health teams from hospitals disseminate skills and knowledge throughout the country. Five innovations that promoted development of present health systems are: 1) training of the barefoot doctors; 2) integration of Western and traditional medicine; 3) emphasis on the use of mobile medical teams; 4) revision of medical syllabus; and 5) reeducation of doctors and other health personnel. The author indicates areas in which the Chinese health system would benefit Western countries: 1) election of hospital management committees by entire hospital staff; 2) introduction of a system of barefoot social workers and doctors; and 3) recruitment of doctors from a wider social base.

- 125 Tchao-iou, E., Tchang, Mou-tsin.,** *Propagande sanitaire de masse en Chine Nouvelle.* (Mass health propaganda in New China). Sante Publique (Bucharest), 8, 1965, 347-350. Fren.

The paper expounds the principles of mass sanitary propaganda and its fundamental role in prophylactic activity. The authors show the specific methods used for controlling the four scourges (rats, bedbugs, flies and mosquitoes) as well as for the eradication of some transmissible diseases such as schistosomiasis. (Journal abstract.)

- 126 World Council of Churches, Geneva. Christian Medical Commission. *Epidemic disease control*. In *Health Care in China: an Introduction*, Geneva, World Council of Churches, Christian Medical Commission, 1974, 53-72. Engl.**

One problem in evaluating China's health care system is the lack of reliable statistics. However, from available data one can obtain a profile of the progress in disease eradication, which indicates a sharp reduction in mortality from tuberculosis, smallpox, cholera, etc. The major factor contributing to success has been the technique of mass mobilization, which has engaged whole communities in pursuing the goal of disease eradication. The first "Patriotic Health Campaigns" attacked the four pests (rats, flies, mosquitoes, and sparrows), and urged the cleaning up of village water supplies. Mass campaigns embody the four health care principles set forward at the First National Health Conference: 1) to rely upon the "mass line" to make health care widely available, 2) stress prevention, 3) utilize all available manpower and medical resources (Western and traditional), and 4) coordinate mass activities in health care and agriculture. Mass mobilization is accomplished using the mass line philosophy, which dictates that a line of action can serve the people when they are thoroughly committed to that line; an attempt is made to involve everyone. China's attempts to eradicate venereal disease and schistosomiasis are documented.

- 127 Worth, R.M., *Rural health in China: from village to commune*. American Journal of Hygiene (Baltimore), 77(3), May 1963, 228-239. Engl.**

Diseases formerly endemic in China are discussed. Under Communism, after 1949, village life changed profoundly and farmers began to

benefit from land reform and new health programmes. The latter emphasized control of communicable diseases, training of additional health personnel, and a massive effort to educate people in sanitation. Mass campaigns against preventable communicable diseases, intestinal infections, and the major parasitic and arthropod-borne diseases have reduced morbidity and mortality. However, it is postulated that diseases spread by the respiratory route e.g. tuberculosis could become a more serious problem in the future.

- 128 Worth, R.M., *New China's accomplishments in the control of diseases*. In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 173-184. Engl.**

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

In 1950, China's Ministry of Health began to organize medical teams for six disease-specific campaigns; smallpox, kala-azar, schistosomiasis, hookworm, malaria, and filariasis. Syphilis was another disease singled out for special attention in the early 1950's. This campaign was carried out by eradicating the social and economic causes of prostitution, examining the whole population, and performing an intensive health education campaign through the media. The Patriotic Health Movement began as an attack on environmental sanitation problems, and focused on specific tasks to be carried out by every person in his home and at work. Examination of Chinese refugees in Macao suggested that by 1961, the specific disease campaigns and the Patriotic Health Movement had had some impact on the health of small villages. The development of a widespread system of local health services, from 1958 onwards, gained impetus from the formation of communes, and placed early emphasis on the provision of modern midwifery and well-child care, including immunization. The author feels that health planners in other countries have much to learn from the Chinese example.

IV Medical Education and Training

See also: 067, 124, 212, 257, 315, 353, 384, 392, 453, 469

- 129 Agren, H.,** *Medical practice in China: a compendium.* Science (Washington), 178, 27 Oct 1972, 394-395. Engl.

Discussing the *Peasant Village Physician's Handbook* (compiled by the medical Revolutionary Committee of Hunan, Peking, People's Hygiene Press, 1971) the author notes that it is intended for general use in the Chinese countryside. It indicates that modern Western medicine and traditional Chinese medicine have been synthesized into a kind of eclectic medicine. The book covers a vast range of subjects, from protection during wartime to ear acupuncture. Guidelines are provided for diagnosis and treatment using both traditional and Western methods. One chapter includes ten pages of basic statistical methods with stress on error analysis. Acupuncture is described from a purely practical point of view. New approaches to medical problems can be seen on almost every page of the book.

- 130 Berger, R.,** *Medical training in China.* Eastern Horizon (Hong Kong), 12(1), 1973, 28-44. Engl.

China's Cultural Revolution revealed a number of weaknesses both in the orientation as well as practice of medical work. In May 1966 the Peking Medical College rebelled against the spirit of "self-interest" that had been the principal motivation in the past — the curriculum had been excessively academic, overspecialized, and unrelated to health needs in China. Students and teachers, reading and discussing Mao Tse-tung's popular articles, looked for an alternative to the self-centred attitude that dominated the medical school. With the declaration in 1968 that the "working class must exercise supervision over everything," factory workers entered schools, universities and scientific institutions to "sweep away notions of élitism." Experimental curricula, a one-year and a two-year course, were established on a small scale, with the intention of combining preventive medicine and treatment,

Western methods and traditional Chinese medicine. By 1971 a three-year course was introduced, students from the countryside and factories making up the enrollment. Entrance to the three-year course depends on the candidate's political outlook, approval by the commune or factory revolutionary committee, and so on. Of the three years, the first four months are spent in college, and the rest of the first year in the countryside. The second year is spent mostly in city hospitals and factories. The third year is spent mostly in the countryside. The sector of the health services system that serves the countryside is the rural co-operative medical service, relying on the work of barefoot doctors. The People's Liberation Army is also playing a major role in raising health standards, mainly through specialized medical teams that tour the rural areas.

- 131 Biering-Sorensen, F., Sonne, O.,** *Laegedannelsen i Kina frem til 1972. (Medical education in China up to 1972).* Ugeskrift for Læger (Copenhagen), 135(26), 25 Jun 1973, 1388-1393. Danish.

Until the Cultural Revolution (1966), medical education in China could be subdivided into a traditional form lasting three to six years and a Westernized form. The latter could be of varying duration such as six to eight years, four to five years, or two to three years. After the Cultural Revolution, these various forms of medical education were abbreviated and amalgamated to a medical training of three years duration with emphasis on practical medical work. Over one million "barefoot doctors" with three to six months' training constitute an important factor in the health services of present day China. (Journal abstract.)

- 132 Bowers, J.Z.,** *Western medicine in a Chinese palace: Peking Union Medical College, 1917-1951.* Philadelphia, Josiah Macy, Jr. Foundation, 1972. 250p. Engl.

Today the former Peking Union Medical College is the leading medical centre in China; it now teaches Chinese traditional medicine as well as Western medicine. The author traces the beginnings of the Union Medical College at the turn of the century, its purchase by the Chinese Medical Board from the Rockefeller Foundation and subsequent renaming — Peking Union Medical College (PUMC). The establishment of the College, admission requirements, curriculum,

staff, facilities, and the school of nursing are described for the golden decade, 1921-1931, and the disruptive years of the following decade. The PUMC was nationalized in 1951 and renamed the Union Medical College of China. That the PUMC was successful in training the leaders of medicine for China is attested to by the fact that when it closed in 1941, fewer than ten of its graduates were in private practice and virtually all of the alumni were teaching medicine, leading hospital medical services, or in governmental positions in public health. References are listed at the end of the paper.

- 133 Bowers, J.Z.,** *Founding of Peking Union Medical College - politics and personalities.* Bulletin of the History of Medicine (Baltimore), 45(4), Jul-Aug 1971, 305-321. Continued, 45, Sep-Oct 1971, 409-429. Engl.

Peking Union Medical College (PUMC) established in 1913 by the Rockefeller Foundation, is discussed in a historical context, with particular reference to faculty, policy-making, and nursing education. In 1951 the PUMC was nationalized by the Chinese Communists and named the Union Medical College of China and in 1957 it was incorporated with the Academy of Medical Sciences of China. The hospital has since been separated from the College and named the Peking Anti-Imperialist Hospital. The long-range goal to train future faculty members who could lead programmes in Western medical education and research in other Chinese medical schools was thwarted because of the College's short life span.

- 134 Bruce, D.,** *Visit to a hospital in Peking.* Australian Nurses' Journal (Melbourne), 65(2), Feb 1967, 33-34. Engl.

An Australian nurse relates her observations of a large teaching hospital in Peking, noting that in addition to the medical school and nurses' training school, the hospital is a medical centre for the surrounding area and holds the responsibility of administering preventive care to the 50 000 people of that locality. The nurse training school accepts girls over 16 years of age with middle school education for a three-year training course, the first year being spent in the school, the second in clinical theory and practical work, and the third in full-time practical work, three months being spent in the country.

- 135 Chan, Chi-Chao.,** *Medical education in mainland China.* Journal of Medical Education (Chicago), 47, May 1972, 327-332. Engl.

Two kinds of medicine exist in China: traditional Chinese medicine and modern medicine. Each province has at least one medical school teaching Chinese medicine (four- or six-year programmes). Modern medical education is more popular and important, with one medical college in each major city and others throughout the province. The three levels of medical schools are national (Capital Hospital Medical University, Peking; Chung Shan Medical College, Canton; First Peking Medical College; and First Shanghai Medical College), provincial, and district. Programmes at the district level last only two to three years and give only the basis of medical science. Since 1949 the Chinese government has opened more than 100 medical colleges, and by 1963 there was one doctor for every 5 000 persons. The programme at Chung Shan Medical College, which the author attended from 1961-1967, is discussed pointing out admission procedures, curricula and examinations, field work, political aspects, and internship.

- 136 Chang, Chia-pei.,** *Combination of traditional Chinese medicine and Western medicine.* Sante Publique (Bucharest), 8, 1965, 453-455. Engl.

Many hospitals and clinics using Chinese traditional medicine have been set up in China, and in most Western-style general hospitals and clinics there are departments of traditional Chinese medicine. Schools for the training of traditional physicians have been established; students can also learn through apprenticeship with veteran traditional doctors and pharmacists. Doctors of the Western school have been encouraged to study traditional medicine, so that the Chinese heritage might be systematized. It is hoped that by uniting two types of medicine, medical science in China will advance to a higher level.

- 137 Cheng, Chu-Yuan.,** *Health manpower in China: growth and distribution.* In Wegman, M.E., Lin, T., and Purcell, E.F., eds., Public Health in the People's Republic of China, New York, Josiah Macy, Jr. Foundation, 1973, 139-157. Engl.

In China a major goal has been to augment the number of medical professionals to meet the needs of the growing population. The author traces quantitative trends that have influenced reforms in medical education and the relocation of medical manpower. No official population-manpower ratio has been promulgated by the Chinese government. The author uses empirical data from countries in East Asia and some Latin

American countries particularly relevant to China to postulate that the demand for physicians in 1966 would be 303 000 for a population of 758 800 000. The demand for intermediate-level medical personnel would range from 680 000 to 712 000 and demand for low-level personnel around 3.3 million. Available data on supply of health manpower shows an upward trend to 1958 but declines after 1961. To accommodate the demand for higher medical manpower (physicians, pharmacists, dentists) medical colleges were tremendously expanded but have been reduced to half in recent years to emphasize training of "barefoot doctors." It is estimated that in promoting noncollege graduates to the rank of doctors, the total number of medical doctors, pharmacists, and dentists would reach 210 000 in 1966. Intermediate medical manpower such as doctors' assistants, nurses, midwives, junior pharmacists, and laboratory technicians are trained in an increasing number of secondary medical schools, signifying the shift in priority. Statistical data reveal that the deficiency of physicians has declined continuously and the gap between supply and demand of intermediate-level personnel is closing. Sweeping reform of Chinese medical and health services has been undertaken since 1965 to deal with an extremely uneven distribution of manpower and facilities. The new system brought into being "barefoot doctors," rural youths given three months local training and further training at an urban centre after some work with the peasants. A further major measure has been the alteration by medical education, with a merging of Chinese and Western medicine. In setting up clinics, health stations, and health rooms, there will be mass participation in rural medical care.

- 138 China News Analysis, Hong Kong. *Training in medicine.*** China News Analysis (Hong Kong), (577), 20 Aug 1965, 1-7. Engl.

All grades of medical staff in China, apart from graduate doctors, are given the common name of medical staff, and are regarded as "trained" if they were educated in special secondary schools. Fully qualified doctors are trained in medical colleges of varying standards. The most highly recognized is China Medical University (formerly Peking Union Medical College). The elementary training provided at special secondary schools has some justification in the present conditions of China where sufficient fully qualified physicians are unavailable. Reports from Chi-

nese sources indicated that reforms in curriculum and administration of medical colleges were taking place in 1965. Teachers and students were being sent to the villages and manual labour was part of the programme. Evening medical schools and half-work, half-study schools have been established to train doctors. Chinese herb medicine or acupuncture are also taught through these short courses. Training of traditional practitioners through apprenticeship is still going on. It is difficult to say how many new doctors are added each year by education or by promotion.

- 139 China PR, Revolutionary Committee of Kirin Medical College. *Kung pei-fang ti-chu u p'ei-hsun ts'an-k'ao shih yung. 1st edition.*** (Training manual for "barefoot doctors"). Peking, Jen-min wei-sheng chu-pan she, Apr 1971. 6 + 10 + 653p. Chinese. This manual is for the northern regions of China only. See entry 140 for volume dealing with southern regions.

The volume was compiled by personnel of the Kirin Medical College in northeast China based on their experience in training "barefoot doctors," in accordance with Chairman Mao's teaching "in medical and health work, put the stress on the rural areas." Although for the most part the book gives detailed instructions on treating patients and preventing diseases with indigenous prescriptions, medicinal herbs, and acupuncture, it also tells barefoot doctors to encourage patients to fight ailments with Mao Tse-tung thought. (Journal abstract, taken from *Newsletter: Centre for Chinese Research Materials*, Washington, D.C., No. 9.)

- 140 China PR, Revolutionary Committee of the Health Station, Chiang-chen Commune, Ch'uan-sha County, Shanghai Municipality. *Kung nan-fang ti-chu p'ei-hsun ts'an-k'ao shih-yung. 4th edition.*** (Training manual for "barefoot doctors"). Peking, Peking People's Hygiene Press, Jun 1970. 6 + 7 + 591p. Chinese.

See entry 139 for volume dealing with northern regions. This manual is being translated into English by the Fogarty International Centre, Bethesda, Md., U.S.A.

A barefoot doctor's handbook, for use as reference in fostering and training work in southern regions, was compiled by the Revolutionary Committee of the Health Station of Chiang-chen Commune of Ch'uan-sha County, Shanghai.

Subjects covered in the manual are recognition of the human body, basic hygiene, birth control, diagnosis and treatment of common diseases, traditional and herbal medicines. A number of interesting things are evident in the manual: there is no distinction between the importance of preventive techniques and the actual practice of medicine itself, and there is great evidence of integrating traditional Chinese medicine and practice with modern Western practices.

- 141 China Reconstructs, Peking.** *U.S. imperialist cultural aggression disguised as friendship.* China Reconstructs (Peking), 17, Nov 1968, 44-48. Engl.

Peking Union Medical College is described as "the source of U.S. imperialism for its towering crimes of aggression against China under the cover of philanthropic undertakings." The College is stated to have been more important as a political tool than as a training institute for physicians.

- 142 Christie, R.V., John E. Fogarty** International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Medical education, training and manpower.* In Topics of Study Interest in Chinese Medicine and Public Health: Report of a Planning Meeting, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH)72-395, 1972. Engl.

Planning meeting on topics of study interest in Chinese medicine and public health, Bethesda, Md., Mar. 15, 1972.

Having visited Peking in 1961, the author recalls that the Peking Medical College, which was closely linked with the Chinese Academy of Medical Science, was the best in China. The curriculum was similar to that in North America, with some instruction in traditional medicine during the clinical years. Other schools had curricula of six, five, or four years, and at that time, 100 000 physicians were trained in Western medicine, 500 000 in traditional medicine. With the changes of the Cultural Revolution, the curriculum at the Peking College was reduced to three years and the number of students greatly increased. Many of the changes in medical education that are being introduced in North America are similar to those that followed the Cultural Revolution in China, i.e. student participation in decision making, abolition of graded examination results, community orientation of medical schools, etc.

- 143 Christie, R.V.,** *Communications: medicine and medical education in China.* Journal of Medical Education (Chicago), 42(5), May 1967, 463-466. Engl.

The result of a visitor-exchange programme between McGill University and the Chinese Medical College has resulted in six Canadian physicians visiting China between 1962 and 1967. All were impressed by the emphasis on preventive medicine. Posters everywhere emphasized the importance of hygiene, i.e. destruction of the four pests. Peking Union Hospital (formerly Peking Union Medical College) is the teaching hospital of the Chinese Medical College with standards similar to those in Canada. The Chinese Medical College is the leading medical college, training teachers and research workers in an eight-year curriculum. Six-year medical schools such as the Chung Shan Medical College in Canton, and five-year medical schools follow similar curricula with a reduced premedical year. Traditional physicians are trained for five or six years, the first year being devoted to the basic sciences under Western-trained instructors. Medical research is centred in the Chinese Academy of Medical Sciences, consisting of 15 institutes whose work is based in special hospitals.

- 144 Collier, H.B.,** *Teaching and research in the basic medical sciences in the People's Republic of China, 1965.* Journal of Medical Education (Chicago), 42(5), May 1967, 467-470. Engl.

A Canadian physician notes a great improvement in the health of China's people since his last visit in 1937. He notes a similar improvement and expansion in medical education, with 80 medical colleges now in existence. Various standards exist amongst medical schools, from the excellent China Medical College in Peking, with standards comparable to Canada, to large provincial schools enrolling 2 000 students. Education costs are covered by the government and students spend their first year following graduation at work in rural clinics. Most schools have three areas of concentration: hygiene, Western medicine, and traditional medicine. Research emphases are traditional drugs, cancer research, and parasitology.

- 145 Critchley, J.E.,** *Medical education in China.* Medical Journal of Australia (Sydney), 1, 19 May 1973, 1005-1007. Engl.

Prior to 1949, the number of graduates from Western-style medical schools in China were totally inadequate for the population, and tended

to remain in the larger cities. Under the new regime, medical schools were established in conjunction with hospitals rather than universities. Medical schools were established for the teaching of traditional Chinese medicine, and now (1973) the Western-oriented medical schools are teaching some traditional medicine. Distinctions between the two are becoming less clear. Doctors of both schools have equal status. The curricula and admission requirements for both types of medical school are outlined.

- 146 Dimond, E.G.,** *Medicine in the People's Republic of China: a progress report.* Journal of the American Medical Association (Chicago), 222(9), 27 Nov 1972, 1158-1159. Engl.

During two trips to China, in 1971 and 1972, the author observed that surgery can be performed using acupuncture anaesthesia, and that there are several centres using this technique successfully in open heart surgery. Acupuncture (a better term is analgesia, not anaesthesia) is not always successful, in which case regular anaesthesia is used. The rationale of acupuncture is not understood, but first-class research is being done, and its use as a therapeutic agent in deafness is widespread. The author believes that the honest, ethical role for acupuncture is a dilemma that the West must face. In restorative surgery China is making considerable advances. The effort to combine Chinese traditional medicine and Western scientific medicine continues. The ancient materia medica are being screened for herbal drugs, particularly for the cure of heart disease, hypertension, and cancer. The Academy of Medical Sciences (Peking) is sponsoring an eight-month intensive study course for Western doctors in Chinese traditional medicine. In medical schools, the new classes have a high number of former barefoot doctors in the freshman class. Medical students continue to have learning experiences in the rural areas. All programs of care, education, and research are directed toward delivering health care to China's rural population.

- 147 Dimond, E.G.,** *Medical education and care in People's Republic of China.* Journal of the American Medical Association (Chicago), 218(10), 6 Dec 1971, 1552-1557. Engl.

There is no way to discuss medical education and medical research in China today other than in a political context. The changes in medical education and medical care are a change in priorities,

the priorities being the immediate need for medical care by the rural population (90 percent of 800 000 000 people) and the need for control of education by the people, not by a preexistent academic framework. The author lists events from 1966 to 1971 to show how these priorities have been accomplished. All medical schools were closed, all students given assignments in the countryside where health workers were needed. At all visible levels this is the accepted system. The present educational structure is outlined using the Peking Medical College as an example. The health personnel have been produced by countryside "rotation," a system in which all urban dwellers work for periods in the countryside. Physicians are used as professionals when in the countryside — conducting education programmes in commune hospitals, mobile health teams to villages, preventive spraying and vaccination, and training of "barefoot doctors," the front-line medical corpsmen who are a combination of farmer and neighbourhood first-aid man. Aspects of the commune hospital are described in detail. At all levels of care, from the commune to the teaching hospital, there is a synthesis of Chinese traditional and modern medicine. Physicians work together with traditional doctors in all health facilities. Basic research is carried on at the Institute of Materia Medica (a component of the Chinese Academy of Science in Peking) for treatment of chronic bronchitis, paralysis, and cancer. China, at the national level, has made treatment of deaf-mutism a major program. The author observed that the problems of prostitution, venereal disease, narcotics, marijuana, alcoholism, and illegitimacy are nonexistent or almost nonexistent in modern China. Large epidemics have responded to improved sanitation, and public health stems from patriotic fervor. Barefoot doctors have brought medical care to the masses. The nationwide physical fitness programme has resulted in a healthy population. However, cigarette smoking is widespread and chronic bronchitis is a major health problem; cancer is a major dread; rheumatic fever, coronary heart disease, and hypertension are common.

- 148 Dimond, E.G.,** *Medical education in China.* Asia (New York), 26, Summer 1972, 60-73. Engl.

To understand China in 1972 and its educational system, one must not attempt to judge what they are doing by "international standards"; one must read the Chinese document in English, *The Anatomy of China*, in which the author explains

the Cultural Revolution and outlines changes in the academic structure. He notes that when visiting China there seemed to be an immense *esprit* — an enthusiasm for what their society is attempting to accomplish. The author finds merit in the situation existing in China, where any student may attend medical school providing he or she has worked, has proven himself a scholar of Lenin, Marx, Engels, and Mao, and has won party endorsement. Another aspect of Chinese medical education is “on-the-job education,” which divides three years of study between basic science, outpatient or outreach work, and hospital training. Continuing education is excellent and occurs in all walks of life. Intensive medical education of the general public has been very effective with regard to simple health measures and national birth control. Through the media the government has mass-educated the people concerning their health. The author points out that many aspects of Chinese medical education would benefit us if we could make them fit our social system.

- 149 Dodge, R.E.,** *Medical education in China.* Journal of the American Medical Association (Chicago), 219(10), 6 Mar 1972, 1339. Engl.

Letter to the editor.

An American physician states that China's medical curriculum is far more appropriate to the needs of the developing world than curricula based on Western models. This is true with regard to shortened length of curriculum, easing of academic prerequisites, emphasis on practical experience, and de-emphasis on specialization.

- 150 Elliott, K.A.,** *Observations on medical science and education in the People's Republic of China.* Canadian Medical Association Journal (Toronto), 92, 9 Jan 1965, 73-76. Engl.

Every institution visited by this Western doctor in China in 1964 dated its reorganization and expansion to seven or eight years prior to 1964. The Chinese Medical College, with an eight-year curriculum, graduated its first class under the new organization in 1965. The Chinese Medical College also does a considerable amount of basic research. The Peking Medical College has a six-year course and admits 400-500 students annually. The Chinese Academy of Medical Sciences is the parent organization of 15 specialized medical research institutes and hospitals, one of which is the Peking Union Hospital whose priorities are research, teaching, and patient care, in

that order. In surrounding rural areas, clinics and hospitals based in the communes give primary medical care, sending complicated cases to Peking hospitals. Visits to the Bethune Peace Hospital, to the Sun Yat Sen Medical College and to three modern medical colleges in Shanghai are discussed. In Shanghai, the headquarters of the Chinese Academy of Science was also visited. Two aspects of medical training and practice are emphasized — preventive medicine and medical service to rural areas. The system of research grants and the equipping of research laboratories are similar to those in Canada. Acupuncture was observed at the Peking Union Hospital. There are now institutes for the scientific study of traditional medicine; colleges of traditional medicine are maintained so that methods may be retained while they are also being scientifically assessed. The author's personal lectures were attended by large and enthusiastic audiences of medical scientists, teachers, and students.

- 151 Esposito, B.J.,** *Medical education in the People's Republic of China.* Forthcoming in Asia Quarterly. Engl. Unpublished document.

This article reviews China's medical curricula, developments at medical schools and the selection process of medical students during and after the Cultural Revolution. In the period before the Cultural Revolution, five- and six-year programmes were common and there was little student-patient contact. During the Cultural Revolution medical schools closed for varying lengths of time, reopening in 1969-70 with reduced and consolidated course requirements, and the inclusion of political education, traditional medicine and military training. Curricula revisions that have taken place in Chung Shan Medical College, Peking Medical College, and Shenyang Medical College are outlined. Basically there are two types of medical schools, one a part-time and the other a full-time facility. At the former, health para-professionals are taught to use traditional and Western style medicine to cure common diseases of the region; there are no age or academic admission requirements. In the latter, Revolutionary Committees have become the governing bodies, reforming the ideology of the staff and encouraging movements of mobile teams from the colleges to remote areas. Severe “struggle-criticism-transformation” sessions took place for the reformation of teaching staffs. The Worker/People's Liberation Army (PLA) teams played an active role in the colleges and hospitals, raising the ideological level of staff.

With the same end in mind, scientists and doctors were dispersed in the countryside where they trained auxiliaries and provided medical care. Medical research appears to be centred at the major schools such as Peking Medical College. Preference for admission to medical school is now given to those who have a rural background with practical experience (many are former bare-foot doctors) and a high degree of political awareness. The starting point for all Communist Chinese training in medical and health work is the political orientation.

- 152 Evans, J.,** *Medical and health professional education in the People's Republic of China: general comments on education.* n.p., 1973. 6p. Engl.

Unpublished document. Background paper prepared for the Canadian medical delegation's visit to the People's Republic of China.

In China, the general pattern of education appears to be standardized. Primary school (six years), junior middle school (two years), and upper middle school all include productive labour as part of the studies. Before entering post-secondary studies, all students must serve at least two years as a peasant worker, factory worker, or soldier. Professional colleges for agriculture, engineering, medicine, and other vocations exist as independent establishments. Since the Cultural Revolution, university programmes have been reduced to three years and are interrupted with periods of practical experience, while teaching methods stress the study of practical problems. University admission requires the student's expression of his particular interest, a review by his fellow workers, a review by the local committee, and a university entrance examination. There are no tuition fees, room and board are provided, and the university community includes facilities (e.g. kindergarten, medical clinic, etc.) for the students, teaching staff, and nonacademic workers. It is administered by a People's Revolutionary Committee. Degrees have not been granted since 1949, and postgraduate work takes the form of research at the university.

- 153 Ferguson, M.E.,** China Medical Board of New York, New York. *China Medical Board and Peking Union Medical College; a chronicle of fruitful collaboration 1914-1951.* New York, China Medical Board of New York, 1970. 263 p. Engl.

The history of international cooperation between the United States and the People's Republic of China in the field of medicine and the education of physicians and other medical personnel are related. The following aspects of the relationship between the China Medical Board and Peking Union Medical College (PUMC) are dealt with: political aspects, economic and administrative aspects. Takeover of the PUMC by the Chinese government in 1951, which ended this cooperation, is discussed.

- 154 Fischer, W.,** *Die Medizin im neuen China. (Medicine in New China).* Materia Medica Nordmark (Uetersen / Holst), 10, Heft 6/7, 1958, 187-190. German.

In 1958 there were approximately 70 000 physicians with Western training for 620 million people in China. The great need for medical personnel, initially after the revolution, led to shorter training of young medical students; even at the present time, five years of training including one year of hospital work appears to be on the short side. These early emergency measures did not give good end results. The number of well-trained university teachers and lecturers is too small to ensure good medical education of the 600 to 800 medical students entering each year into the 38 medical schools operating in China and teaching staffs are overworked. Medical research appears to be well directed by qualified specialists; fields of main research are arteriosclerosis, schistosomiasis, malignant tumors, and birth control. The successful control of various epidemic diseases is outlined. With regard to the hospitals, reportedly a total of 1 000 new hospitals have been constructed in China since 1948. However, the number of hospital beds available is greatly inadequate. In Peking there are 11 000 beds available for 3 million people; in Shanghai, only 17 000 for 7 million people. The university hospitals visited by the author were excellent. Public health education is very well organized in China; small medical units are open at many places in the cities. Traditional Chinese methods of treatment are used exclusively in a large number of hospitals. It is concluded that medicine in China has made great advances within a surprisingly short period of time and the author predicts that China will soon reach the level of medical standards of the Western world.

- 155 Flato, C.,** *Cultural Revolution brings change to China; Western and traditional medicine now mix.* The Nation's Health (Washington), Oct 1972, 4-5. Engl.

See entries 257 and 258 for complete series.

Two systems of medicine, Chinese traditional and Western, enjoy equal status in China. As a result of the Cultural Revolution, the following changes have been brought about in medical education: 1) administration of medical schools is now shared with Revolutionary Committees made up of all staff and faculty members, students, and Communist Party cadres, 2) curriculum stresses the practical side of medicine, 3) students come more from agricultural workers and factory workers families, some being former barefoot doctors, worker doctors, or nurses, 4) admissions policies stress work history, political activity, aptitudes, and ability to relate to people, 5) the numbers of women now entering medical school is increasing. In medical practice, the stress has been on supplying manpower for remote rural areas, re-orienting the former elitist thinking of physicians, and recruiting large numbers of health workers. Two medical schools, each with three-year curricula, are discussed with respect to teaching priorities.

156 Fornara, P., *Impressioni di un pediatra pensionato sull'insegnamento della medicina in Cina. (Impressions of a retired pediatrician on the teaching of medicine in China).* Minerva Medicine (Turin, Italy), 63(41), Jun-Jul 1972, 10-16. Ital.

In 1966 the author visited an American-built hospital, formerly Peking Union Medicine Center, observing 100 well-equipped operating rooms, a pharmacy with up-to-date Chinese-manufactured antibiotics, and an acupuncture department in classic national medicine based on plant and herbal remedies. Statistical data on the number of doctors (both traditional and Western trained), hospitals, and barefoot doctors is quoted. Mao's order that medicine be "red and rural" led to the creation and training of "barefoot doctors" who in three- to five-month courses are taught to recognize and treat the more common illnesses, to give injections, first aid, artificial respiration, and acupuncture. These doctors work in the countryside both as peasants and doctors, then take an improvement or refresher course at some hospital medical center and then return to work in the country as doctors. Thus diffusion of medical and health work is spread from cities to the entire countryside. The old system of medical education was suspended in 1966 and since its recommencement in 1970 the study of medicine lasts three years, the study of pharmacy two and one-half years. Male and female

nurses having five or more years of practical work can be admitted to medical schools and obtain degrees in one year. The great novelty of Chinese medicine is the "barefoot doctors" because after such a short time in school they have learned the solution of highly scientific problems and have successfully merged the knowledge of ancient traditional Chinese medicines with that of modern medicine.

157 Green, R.P., *China: a medical student's viewpoint.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 29-31. Engl.

Medical students in China today (1973) are trained in three years as opposed to the six year curriculum prior to the Cultural Revolution. The student enters at around 20 years of age, having graduated from senior middle school and worked two years in productive labour. Entry is determined by recommendations from the governing body of the student's particular commune. The first year students' classes are mainly the basic science courses. The second year concentrates on clinical courses, and the third is field work in commune hospitals and clinics, factory hospitals and clinics, and some rural-urban hospital settings. The Chung Shan Medical School and Hospital in Kwangchow, although somewhat gloomy in appearance, appeared to be offering effective health care service. China's experiment in medical education seems to be functioning well.

158 Henschen, F., *Kinas nya "barfotadoktorer". (New barefoot doctors in China).* Lakartidningen (Stockholm), 66(18), 1969, 1850-1852. Swedish.

This article is largely a direct translation from English of an item that appeared in the third issue of the *Red Flag* for 1968. Large numbers of "barefoot doctors" were trained following a directive from Chairman Mao in 1965. They spent half of their time as doctors and the other half doing farm labour. These in turn have trained many others as health workers. A series of examples is given on how these doctors carry out their work. The examples take the form of a polemic against formally trained doctors who are out of touch with the people and often have trouble making the transition from theoretical knowledge to practical application. By teaching the peasants proper hygiene the barefoot doctors have made an enormous contribution toward disease prevention. After a practice of two years a barefoot doctor is able to write out about 100

prescriptions and diagnose 100 illnesses common in farming districts. He can make acupunctures at more than 100 points on the body, and can cure such common and serious diseases of the countryside as measles, pneumonia, and pleurisy.

- 159 Huth, E.J.,** *Turmoil in medical education: Peking, Paris, and points West.* *Annals of Internal Medicine* (Philadelphia), 70(1), Jan 1969, 225-228. Engl.

China's upheavals in 1968 resulted in a purge of academic medicine. The *Chinese Medical Journal* (later *China's Medicine*) for instance, has become a political testimony to Mao Tse-tung thought. China Medical College was singled out and criticized for the inadequate training its graduates received in dealing with the needs of the patient. Simultaneously, student criticism in Russia, Britain, France, and the United States pointed out the need for improved and increased medical care and schools better equipped to prepare physicians in their respective countries.

- 160 Journal of the American Medical Association, Chicago.** *Medicine in People's Republic of China: reprise.* *Journal of the American Medical Association* (Chicago), 222(9), 27 Nov 1972, 1179. Engl. Editorial.

This editorial gives credence to Dimond's observations as to whether or not Western physicians can understand Chinese medicine in terms of Western science. It is pointed out that: 1) acupuncture analgesia permits major surgical procedures; 2) research is seeking a scientific explanation of acupuncture; 3) therapeutic acupuncture has a place in treatment of some disorders; 4) traditional Chinese medicine continues to be taught and scientifically examined. Also of note are the following: the new medical classes have a large number of former "barefoot doctors," the first medical journal to be published since the Cultural Revolution is forthcoming (1972), and the Chinese medical programme is aiming at providing medical care for all the people.

- 161 Katz, A.M.,** *Medical education in China, 1973: service to the people.* *Pharos* (Chicago), Oct 1973, 139-141, 151. Engl.

Pursuit of personal goals has little place in the recruitment, training, and practice of the Chinese physician; the medical student is chosen mainly for his "class consciousness." Students are first approved by their fellow workers on the basis of their record of service and their political

knowledge. All applicants are required to be in their twenties, unmarried, to have completed middle school, and to have had two years work experience. Medical curriculum has changed since the Cultural Revolution to bring the schools into line with current health needs. The course is reduced to three years, includes traditional medicine, and is closely linked to commune and county hospitals where students and faculty work and study. In many of the teaching hospitals, one-third of faculty and staff work and live in the countryside at any given time. Based on his observations the author relates the conditions of teaching and laboratory facilities and the attitudes of students to their studies. Illustrations of curricula are based on two major hospitals: Chung Shan Medical School in Canton, and the Medical School at Shanghai. The author's impressions of the medical education system are favourable.

- 162 Kilborn, L.G.,** *Medical education in Communist China.* *Journal of Medical Education* (Chicago), 29(4), Apr 1954, 21-27. Engl.

The former Dean of Medicine and Director of the College of Medical Science, West China Union University, Chengtu, Szechwan, China, believes that steps taken by the Communist government to improve health are in fact retrograde steps: 1) Communist medical ethics transformed the medical profession into an instrument for the enforcement of official policy, i.e. the elimination of certain groups whose existence was believed to constitute a danger to the new order; 2) repudiation of the scientific spirit was characterized by the discarding of three principles; honesty in observation and reporting, a critical attitude, and complete objectivity in evaluation. Examples from conference reports in 1951 are quoted, which point out that government dictates on methods of treatment and government findings are accepted without questioning; 3) standards of medical education were lowered, with an emphasis on quantity rather than quality.

- 163 Lim, R.K., Wang, G.H.,** *Physiological sciences.* In Gould, S.H., ed., *Sciences in Communist China*, Washington, D.C., American Association for Advancement of Sciences, 1961, 323-362. Engl.

In this paper the following aspects of the physiological sciences in China are discussed: Chinese traditional medicine, the history of Euro-Asian and Euro-American influences, the Rockefeller Foundation and Peking Union Medical College,

research institutes before Liberation (Academia Sinica, Peiping Academy, and Lester Institute), medical schools from 1949-1959 and the training of Western-type and traditional physicians, research institutes as of 1949 (Academia Sinica, Academy of Medical Sciences of the People's Liberation Army, Chinese Academy of Medical Sciences), as well as the Chinese Association of Physiological Sciences and associated scientific journals. In addition to the above-mentioned aspects of medical physiology, some attention is given to the agricultural and physiological sciences.

- 164 Lindsay, K.,** *Where patients and doctors help train each other.* Health Rights News (Chicago), Dec 1972, 13. Engl.

Based on two discussions with medical students and teachers at Sun Yat Sen Medical College and Sin Hwa Medical College during a tour of China, this article outlines medical education in China with respect to curricula, student accommodation, admission requirements, political ideology, physicians' responsibility to the community — and status of women in the field of medicine.

- 165 Lubic, R.W.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Observations on nursing and midwifery education.* In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 136-138. Engl.

Just as the medical schools were closed in the People's Republic of China in 1966, so were nursing and midwifery schools. The formal reopening of nursing and midwifery schools may come in 1974. Since the closing of the schools, education of nurses and midwives has been functioning almost entirely on an informal apprentice basis. It is apparent that all nurses learn to do normal deliveries and are taught to insert intrauterine devices. Nurses have a junior middle school background, and provided they have ability and demonstrated political affiliation, they have access to university medical education. The forthcoming nursing curricula may be of two years duration, the last six months being spent in full-time practice. It is possible that each hospital will train its own nurses. Nursing and midwifery education seem to be on the brink of revitalization.

- 166 Mann, F.,** *Chinese traditional medicine: a practitioner's view.* China Quarterly (London), (23), Jul-Sep 1965, 28-36. Engl.

Traditional Chinese medicine employs treatments such as acupuncture, herbal medicine, massage, etc. Western medicine's greatest contribution in China has been in sanitation and preventive medicine. Separate medical schools exist for both traditional Chinese medicine and Western scientific medicine although each gives additional instruction in the principles of the other; hospitals are staffed by both types of physician. The theory and practice of acupuncture are discussed.

- 167 Mann, M.,** *Medical education in the People's Republic of China.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 8-10. Engl.

A visit to the Chung Shan Medical College in Kwangchow (Canton), China, in 1972 revealed that a three-year curriculum is being used. The first year is devoted to basic science courses, the second to instruction in clinical medicine, and the third to clinical practice. In observing a lecture it was noted that few audio-visual aids were used. Selection of candidates begins with nominees from factory or commune governing bodies. Further screening is performed by the faculty for academic qualifications. Students have additional coaching or tutoring if necessary. Physical teaching facilities seemed adequate. Teachers seemed as professional and competent as in any other medical school. Judged by Western standards, this system is not capable of producing the scientist-physician with a sound basic knowledge of cell biology, physiology, etc. However, they are attaining a goal of training larger numbers of physicians to meet the urgent needs of communes, factories, etc. If the plan to give specialized training to minimally-trained physicians is carried out, these post-graduate physicians may demonstrate the professional skill of American or European counterparts.

- 168 Morita, N.,** *(Nursing in Red China).* Japanese Journal of Nursing (Tokyo), 60, Feb 1966, 84-85. Japanese.

Returning to Japan after a one-month stay in China, an observer relates her experiences. She was shown a public hospital building provided with 400 beds and visited daily by 700 outpatients. In a surgical pavilion of 100 beds, 40 doctors and 30 nurses were on staff. Night duties are performed in three shifts and a team of two

nurses and doctors are on duty. All nurses studied four years at the university, following high school. Doctors have four years of university education followed by two years of practical training. There is an internship system. Eighty percent of all doctors, and almost all pediatricians are female. Courses include Western and Chinese medicine. Those who have completed their curriculum in Western medicine take evening classes in Chinese medicine, so that the characteristic feature of medical care is to provide mixed treatment. The stress is laid upon preventive medicine. Hospitalization costs are covered half by the state, half by the health insurance. Married nurses commute from worker's residences. Pregnant nurses use the hospital's transportation. There are 80 boarding rooms for single nurses. The rent for a room is approximately Y100(33 cents), board is Y2 200(\$7.30). The salary is about Y7 000(\$23.30).

169 Orleans, L.A., *Medical scientists.* In Orleans, L.A., Professional Manpower and Education in Communist China, Washington, D.C., National Science Foundation, 1961, 134-142. Engl.

As of 1961, there had been no acceleration in the training of doctors comparable to the increasing numbers of engineers and other technical personnel. In rural areas, the government was relying on subprofessionals to make improvements in health and sanitation. Chinese traditional doctors were given equal status with Western physicians in 1958, and all physicians trained in Western medicine were required to study traditional medicine. Medical schools were divided into medical, public health, oral medicine, and pharmacology departments. In 1957 one source reported 38 medical institutes in China. By 1961 almost 40 percent of the students in these colleges were women, and the number of graduates trained in Western medicine could be between 50 000 and 75 000. Although efforts were being made to distribute some of the medical personnel into rural areas, at least 75 percent of all qualified doctors were still in the cities, which contain only 15 percent of the population.

170 Orleans, L.A., *Medical education and manpower in Communist China.* In Hu, C.T., ed., Aspects of Chinese Education, New York, Columbia University, Teachers' College Press, 20-42. Engl.

Also appears in the Comparative Education Review, Feb 1969, 20-42.

This paper describes the Chinese Communist education of medical personnel and estimates the number engaged in medical activities at the various levels, from medical doctors to part-time medical practitioners. In pre-Communist China, most medical doctors were trained abroad. Medical schools in China were part of large comprehensive universities. The Communists removed medical schools from the comprehensive universities. A multiplicity of approaches and curricula in medical education is paralleled by an apparent lack of standardization in controls. During the Great Leap Forward, all education in China was integrated with production, and following those years, higher medical schools were also called upon to support agriculture, through disease prevention work in "the front line of agriculture" or operating mess halls, etc. Although quality medical education did not disappear (the Medical College in Peking continued to offer a five to six year curriculum) it did simply "fade out" in some cases. By 1969 each province and autonomous region had at least one medical college; the exact number of institutions is hard to determine. The higher medical institutions are listed. It is estimated that by the end of 1966, approximately 200 000 persons on the Chinese mainland had completed higher medical education (of four- five- or six-year courses). Traditional medicine plays an indispensable role in the medical system. It is widely accepted, and in addition to continuing the apprenticeship training method, several educational institutions for teaching Chinese traditional medicine have been established. China placed the emphasis in medical education on secondary personnel and on a variety of short-term medical training courses for medical and public health workers. Their work is supplemented by mobile medical teams. It is estimated that there are 500 000 assistant doctors, nurses, midwives, and pharmacists with completed secondary medical education. Steps to provide more health centres for the peasants have included a rotation system, whereby urban medical personnel spend a year or so in the countryside, and the permanent resettlement of lower level medical personnel in the county and commune health centres. At the bottom rung of the medical personnel ladder are part-time medical workers, including midwives, first-aid workers (Chinese Red Cross Society) who organize blood donors, provide home care, and promote sanitation campaigns.

171 Peking Review, Peking. *Orientation of the revolution in medical education as seen in*

the growth of "barefoot doctors": report of an investigation Shanghai. Peking Review (Peking), 11(38), 20 Sep 1968, 18-22. Engl.

In the rural counties surrounding Shanghai, large numbers of barefoot doctors have been trained. These health personnel generally spend half their time doing farm work and are paid as agricultural workers. They have played a tremendous role in carrying out the policy of prevention first. Approaches to barefoot doctor training are discussed.

172 Peking Review, Peking. *Revolutionaries of a medical college denounce the revisionist line in education.* Peking Review (Peking), 11(17), 26 Apr 1968, 16-18. Engl.

It is pointed out that in the China Medical College in 1968, as in other universities and institutions, there was an upsurge in the movement to revolutionize education. The college's revolutionaries opposed the orientation toward an intellectual elite destined to serve an urban minority group, in favour of an emphasis on the rural areas in health work.

173 Peking Review, Peking. *Training red doctors from among the workers.* Peking Review (Peking), 12(5), 31 Jan 1969, 17-18. Engl.

The decision of Shanghai factory workers to train medical workers from among the working class was made in response to Mao's wishes. Eleven workers, recommended by their comrades and approved by the Revolutionary Committee, were sent to a hospital for training. Training of these members of the "red doctors' class" concentrates on clinical observation and practical work. They have a strong sense of revolutionary responsibility, and the aim of their study is to enable the working class to exercise leadership over medical work. Several other factories and plants in Shanghai are trying out ways to train medical personnel straight from the workers; thus, a contingent of working-class medical personnel is gradually forming.

174 Penfield, W., *Oriental renaissance in education and medicine.* Science (Washington), 141(3586), 20 Sep 1963, 1153-1161. Engl.

In 1962, the author observed education and medicine in China. Noting that during the 40-50 year pre-Liberation period only 18 000 qualified doctors had been trained in China. Yet from

1949 to 1962, 102 000 physicians were graduated from modern medical schools and qualified nurses, technicians, midwives, numbered 450 000. Medical teaching includes several different curricula, eight years (Chinese Medical College, Peking) for training teachers and research workers, six-, five-, or three-year curricula to prepare physicians for practical needs of factories, mines, and farms. Peking Union Medical College, Peking University, and Chung Shan Hospital, Shanghai's leading teaching hospital, are discussed in terms of admission requirements, courses available, student accommodation, etc. Both traditional and modern surgical practices especially in neuro-surgery are discussed. It appeared that improvement of general health conditions had lowered the death rate, and that the birth control campaign is underway with an emphasis on late marriage and small families.

175 Penfield, W., *China mission accomplished.* Canadian Medical Association Journal (Toronto), 97, 26 Aug 1967, 468-470. Engl.

While visiting China in 1962, it was discovered that 500 000 traditional physicians were practicing, and that colleges of Western medicine were established in every province except Tibet: 100 000 doctors had been trained in Western medicine. Teaching hospitals in all of the largest cities appeared to be first class, and a beginning had been made in research. The roles of Norman Bethune and Leslie Kilborn as medical missionaries in China are considered.

176 Pickowicz, P.G., *Barefoot doctors in China: People, politics and paramedicine.* Eastern Horizon (Hong Kong), 11, 1971, 25-38. Engl.

In addition to the fact that training medical doctors takes too long, it is expensive and many graduates have no interest in general practice. This essay is about China's approach to the same problem. Specifically, it deals with the most significant health force in China, the barefoot doctor, and in doing so it takes account of the most significant book in China, *The Instruction Manual for Barefoot Doctors*, first published in June 1970. It also draws upon the author's personal experiences in China during June and July 1971, as well as articles that have appeared in the Chinese press on the subject of barefoot doctors. The article describes how barefoot doctors are recruited, trained, and paid in China.

- 177 Quijada Cerda, O.A., *Algunos aspectos de la enseñanza medica. (Aspects of medical training)*. In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 149-170. Span.

See also entry 324.

Without abandoning the general directive for the construction of socialism and the principle of self sufficiency, a policy on medical personnel training was established based mainly on the division of work by technical functions and not on hierarchy, which would be tantamount to social stratification. As regards technical training, the Chinese emphasize Western medicine, without relegating their traditional brand of medicine to an inferior status. Eighty schools of Western-type medicine have been established since the revolution as opposed to four medical schools where traditional medicine is being taught. To achieve the necessary efficiency in the exploitation of technical training, it was necessary to instill in the profession a "working morality"; this was accomplished by teachings of revolutionary history in China, socialist education, political economy and Marxist philosophy. As soon as possible after the Revolution, the recommendations of Mao Tse-tung concerning the mobilization of the masses for the improvement of their health were implemented, by the creation in 1952 of the Patriotic Health Movement. To speed up the training of medical personnel physicians were trained at three levels of competence: Middle Schools, Schools of Medicine, and Medical Colleges. The curricula of some of the medical schools are discussed.

- 178 Said, H.M., *Medicine in China*. Karachi, Pakistan, Hamdard Academy, 1965. 306p. Engl.

Recording a visit to China in 1963, a medical doctor relates observations of the merging of Chinese traditional medicine with Western-style medicine, and gives as background material a thorough historical outline of China's medicine, surgery, materia medica, and physicians throughout the ages. Modern application of ancient medical knowledge is observed being practiced alongside modern scientific medicine. It is pointed out that for centuries the development of medicine in China remained under state organization, and the People's Republic of China have reaffirmed this direct state supervision. Ways in which different medical techniques and remedies entered China are discussed, including

Western influence from 1842 until 1949. Observations of medical institutions indicate texts used, curricula, and efforts to unite the traditional and the modern at such institutions as 1) Academy of Traditional medicine at Peking, 2) Institute of Internal Medicine (where a combination of modern therapy with traditional medicine was demonstrated), 3) Pharmaceutical Research Centre (within the Academy of Chinese Traditional Medicine) — traditional and modern doctors, pharmacists and chemists collaborating closely in research, 4) Academy of Medical Sciences, of which the Peking Union Hospital is the research base, and Peking Medical College, 5) Peking College of Traditional Medicine, 6) Fung Jen Tang Factory of Herbs, Peking, 7) Peking Children's Hospital, etc. Therapy is briefly described.

- 179 Salaff, J.W., *Physician heal thyself*. Far Eastern Economic Review (Hong Kong), 44, 27 Oct - 2 Nov 1968, 291-293. Engl.

A serious cost of China's Cultural Revolution seems to have been declining standards of public health, and closing of medical schools. The author examines Party criticism and reorganization of public health structure, as well as criticism of the class composition of the medical profession and of professionalism per se. The new governing body of medical institutions is the Revolutionary Committee, which carries out educational reforms — in particular the integration of theory with practical application, and reducing the length and difficulty of training at the higher level. The new medical curricula will stress diseases common to rural areas. Training requires active participation in rural medical teams. Bare-foot doctors have medical and political functions — preventive care, and training responsibilities as well as teaching Mao Tse-tung thought.

- 180 Saward, E.W., *Presentation of the current education of the physician in the People's Republic of China and the effect of the Cultural Revolution on this pattern*. Rochester, N.Y., University of Rochester, School of Medicine and Dentistry, Nov 1973. 14p. Engl.

Unpublished document.

Paper presented to the American Public Health Association Annual Meeting, San Francisco, California, Nov. 1973.

Information received while touring China in 1972 indicated that from 1949 to the Cultural Revolution, 250 000 Western-style doctors were trained. The medical schools were closed during

the Cultural Revolution but have since started training physicians again. Training of auxiliary medical workers and rotation of urban health teams to the countryside are ways of dispersing health care to all the people. The government health agency at the provincial level is the Health Bureau, which encompasses medical care, health education, training of health personnel, manufacture of pharmaceuticals, environmental sanitation, etc. The Cultural Revolution has altered the training of physicians with respect to admission requirements, curriculum, administration, financing, and so on. Students are selected on the following basis: 1) students must have worked for two years after high school; 2) commune or factory members propose nominees for their political ideology and ability to work and relate to others; 3) many have working experience as barefoot doctors, nurses, or paraprofessionals, or have been members of the People's Liberation Army, and 4) married students are excluded. Curricula have been altered in the following ways: 1) length of training period is reduced to three from three and one half years; 2) the first year is spent in the medical school, the second and third in hospital and field work. Post-graduate education is not as clearly defined or as formalized as in the United States. The present curriculum is regarded as an experiment that has not been operative long enough to be evaluated. Discussion of the curriculum is ongoing. Administration of the medical school is under the Revolutionary Committee.

- 181 Sidel, R., *Women in medicine in the People's Republic of China.* The New Physician (Rolling Meadows, Ill.), May 1973, 300-304. Engl.**

Also appears in Eastern Horizon (Hong Kong). See entry 182.

In Chinese medicine, women have an increasing involvement. About 50 percent of the students in medical schools visited in 1972 were women and roughly half of the estimated one million barefoot doctors are women. In the same effort to improve medical care in rural areas, peasants who live and work in the communes have been trained as midwives. All of these women work half of their time in the fields and spend the rest of the time delivering babies and providing family planning for commune women. The significance of large numbers of women midwives and barefoot doctors is significant in that these health workers later have access to medical school. Conditions in medical school are highly favourable to women completing training. Tuition

is free. Living expenses are minimal. After training, the structures of medicine and of family life are conducive to women's participation, although they still have a disproportionate share of administrative roles. Medical and scientific institutions are favourable to active female involvement in medicine, in that they have living quarters, dining halls, preschool and primary school facilities on the premises. At the end of paid maternity leave, women can leave infants in the care of grandparents or bring babies to work with them, place them in a nursing room, and arrange two breast-feedings. Nurseries care for children until the age of three, when the child attends kindergarten. China's medical profession has been truly opened to women; what is left is for women to take their place as teachers in medical schools, as administrators, and as leading members of revolutionary committees.

- 182 Sidel, R., *Women in medicine in China.* Eastern Horizon (Hong Kong), 12(4), 1973, 57-60. Engl.**

For abstract, see entry 181.

- 183 Sidel, V.W., *Medical education in the People's Republic of China.* The New Physician (Rolling Meadows, Ill.), May 1972, 284-291. Engl.**

For abstract, see entry 184.

- 184 Sidel, V.W., *Medical personnel and their training.* In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Bethesda, Md., U.S. Dept. of Health Education and Welfare, DHEW Publication No. (NIH) 72-67, Jun 1972, 151-171. Engl.**

Health manpower in pre-Liberation China is discussed briefly, pointing out that little was done to relieve the vast shortage of medical personnel. Following Liberation (and before the Cultural Revolution) there was major reconstruction of the medical schools, based on Soviet models. The number of medical schools increased, and efforts were made to integrate the doctors of traditional medicine with the doctors of Western medicine. Another source of medical manpower was the development of middle medical schools, training junior middle school graduates for three years as assistant doctors, nurses, midwives, pharmacists, radiologists, etc. Statistical data indicate the estimated numbers of all categories of medical personnel. During the height of the Cultural Revolution, former medical education was almost entirely discontinued. Redistribution

of existing health manpower through rotation from urban to rural areas, and through the creation of new types of health workers (barefoot doctors, worker doctors, and Red Guard doctors) was the result of Mao's dictum "In health and medical work, put the stress on the rural areas." Medical schools, having been closed to new entrants for three years, reopened in 1969 on an experimental basis. Entrance requirements now include ideological commitment, academic ability, and physical fitness, as well as the recommendations of applicants' fellow workers. Length of training has been shortened and the emphasis shifted to the practical as opposed to the theoretical. Barefoot doctor training varies from place to place but frequently consists of three months formal training, followed by supervised on-the-job experience. Worker doctors are trained for about one month, but continuing supervision and training are essential. Red Guard doctor training, lasting only ten days, is continued by daily discussion of case-work with the doctor assigned to the health station. (Tables include "Excerpts from the Table of Contents of the Barefoot Doctor's Handbook", and "Standard list of items included in a barefoot doctor's bag".)

- 185 Sidel, V.W., *Medicine and public health*.** In Oksenberg, M., ed., *China's Developmental Experience, Proceedings of the Academy of Political Science* (New York), 31(1), Mar 1973, 110-120. Engl.

Pre-Liberation China was confronted by overwhelming problems, with totally inadequate manpower and resources. The National Health Congress of 1950 adopted the following principles, which were guidelines for the following 15 years: 1) health services should serve the workers, peasants, and soldiers, 2) preventive medicine should be stressed, 3) work of traditional and modern physicians should be merged, 4) health work should have the people's full participation. However, fulfillment of these principles still left a maldistribution of medical resources in the rural areas, prompting Mao to issue directives for rotation of all urban health workers to the countryside, development of new types of health workers (such as the barefoot doctor, Red Guard doctor, etc.) whose major functions have been the promotion of family planning, new criteria for selection of candidates and reduced curriculum for medical schools, and decentralization of health care. China's accomplishments are remarkable. In considering the applicability of China's experience to the United States, it is

felt that techniques of treatment, selection and training of health workers, and organization of public health and medical care might be beneficial, although transfer of practices in the area of treatment would be much easier than in the areas of training and organization.

- 186 Sidel, V.W., Sidel, R., *Medical education*.** In Sidel, V.W., Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 111-126. Engl.

The authors discuss changes that have been brought about in China's medical education system by the Cultural Revolution. Each medical school has developed its own experimental curriculum since the Cultural Revolution. A three-year experimental programme at Peking Medical College and Tientsin Medical College include a first year of basic sciences, a second of clinical specialties and public and traditional medicine, and a third of practical work. Considerable emphasis has been placed in all medical schools on teaching traditional medicine. Postgraduate education still goes on, mostly through one-year courses in the teaching hospitals. Much stress is placed on the "reeducation" of urban specialists by means of rotation to the countryside or factories. Continuing education is provided through conferences and through mutual and self-criticism.

- 187 Sidel, V.W., *Role and training of medical personnel*.** In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 158-168. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

Some generalizations on the role and training of medical personnel in China are presented, on the basis of observations made in 1971: 1) There is still a relative shortage of resources for health care in rural areas, but the emphasis on these areas is increasing; 2) most services and training programmes are being decentralized; 3) major efforts are being made to integrate traditional Chinese medicine with Western medicine; 4) a broad spectrum of medical care personnel is being developed; 5) emphasis is placed on skills rather than on credentials; 6) the masses are

mobilized to participate in personal and community health care; 7) para-professionals (midwives, barefoot doctors, Red Guard armies) are widely used; 8) "middle medical personnel" were developed during the period of Soviet influence; 9) there have been major changes in recruiting and training doctors of Western medicine; 10) the salary structure is being altered in the wake of the Cultural Revolution; 11) professionals and intellectuals are being "reeducated," through periods of work in the rural areas; 12) there is a strong emphasis on continuing education; 13) the emphasis is on service rather than on personal reward.

- 188 Sieh, M.,** *Medicine in China: wealth for the state. Part I,II.* Current Scene: Developments in Mainland China (Hong Kong), 3(5), 15 Oct 1964, 1-12; 3(6), 1 Nov 1964, 1-15. Engl.

Based entirely upon interviews with refugees from mainland China, this article describes in some detail the type of medical care and training available in China as of 1964. At that time medical education for Western-trained doctors was once again a six-year course. The typical medical curriculum is outlined, noting that all students must do two months manual labour in the countryside. After graduating, doctors are assigned a post, regardless of personal consideration. Nurses, if fully qualified, have had two years academic study and two years practical experience; however, there is the possibility of a worker being promoted to the position of nurse and then being trained by the junior resident doctor. In country areas, where many political zealots are sent, the medical doctor in charge has the responsibility of training and utilizing these Party people. Other aspects of health services discussed here in detail include hospital facilities, financial aspects of medical care, distribution of health services, commune health facilities, and rotation of urban medical personnel to rural areas.

- 189 Sieh, M.,** *Doctors and patients.* In Liu, W.T., ed., *Chinese Society under Communism: a Reader*, New York, John Wiley and Sons, Inc., 1967, 496p. Engl.

The duties and responsibilities of Western-type physicians in mainland China, the work of herbalists (traditional practitioners), and "middle doctors" (assistants to regular doctors), their training and responsibilities are outlined. The admission of students to medical schools, curricula followed, and postgraduation assignments

are described. Hospital facilities for bed-ridden patients, financial aspects of medical care, the distribution of health services, commune health facilities, and rotation of urban medical personnel to rural areas are aspects of health services discussed here in detail.

- 190 Signer, E., Galston, A.W.,** *Education and science in China.* Science (Washington), 175, 7 Jan 1972, 15-23. Engl.

China's Cultural Revolution initiated a number of reforms in formal education; the university curriculum has been shortened, students and teachers spend one to two months each year working on farms or in factories, study time is spent on political ideology (the philosophy of Mao Tse-tung), and grades have been de-emphasized and cooperation stressed. The universities are governed by Revolutionary Committees, which include 1) cadres (managers or officials, usually members of the Communist Party), 2) the masses (students, professors, workers), and 3) the People's Liberation Army. Peking University, Chungshan University (Canton), and Fudan University are three that the author visited. To be admitted, students must be at least 20 years old, have worked for two years after high school, be qualified in political ideology, and be nominated by their production unit. These radical changes in education policy are intended to distribute education among the masses and eliminate the isolated intellectual classes from society. Research institutes, like the universities, are run by Revolutionary Committees. Laboratories visited by the author appeared to be operating at a reasonable level, some having considerable access to Western science. As part of the general policy of "integrating with production" research is primarily applied rather than basic. Scientists are often closely involved with a specific factory or commune. There is a strong attempt to narrow the gap between experts and the average workers — to abolish elitism. Ramifications of the Cultural Revolution in health care have resulted in one-third of all urban medical personnel being permanently in the countryside. The remaining two-thirds are organized in mobile teams that tour the outlying areas occasionally. Measures are being taken to reduce the population growth rate and traditional medicine is being included in the health system.

- 191 Sulzmann, R.,** *Traditionelle und moderne Medizin in China. (Traditional and modern medicine in China).* Medizinische Welt

(Stuttgart), 32, 9 Aug 1969, 1759-1763. German.

The number of physicians and nurses has increased in China since 1949, but the total number is still inadequate. Suitable men and women have been given short training courses as paramedics. Training of physicians (in the Canadian sense) is inadequate and old-fashioned in many respects. In 1958, the entire People's Republic of China had only 75 000 physicians and 131 000 medical assistants, i.e. one physician per 9 000 people. These 75 000 physicians are trained approximately according to American or European standards. In addition, there were 500 000 paramedics working in that year. The paramedics are able to take additional courses and can eventually become physicians. In the country, the paramedics or "barefoot doctors" play an important role; they, too, get additional training from time to time. Barefoot doctors are paid about \$160 (Canadian) a year, which is about the same amount as a good farm worker makes. Traditional Chinese medicine including acupuncture is briefly reviewed (without references). Medical students today still undergo training in this old art as well as in the use of old herbal prescriptions. The recent Cultural Revolution has also changed the academic training of medical students. Revolutionaries maintained that the "physicians of the first class" (i.e. university trained personnel) were "unable" to do their job after six to eight years of studies, because they had been isolated from the workers and farmers. These attacks have led to certain changes in curricula, including some integration of traditional methods into modern medicine. All graduates must leave the cities and work (at least for a certain period of time) in the country.

- 192 Summary of World Broadcasts, Reading, England.** *Revolutionisation of medical education.* Summary of World Broadcasts (Reading, England), 3 May 1969, pages FE/3064/B/2-FE/3064/B/3. Engl.

Under the leadership of worker-PLA (People's Liberation Army) propaganda teams and the College Revolutionary Committee, students and teachers of Anhwei Medical College travelled on foot to the countryside in December 1968. During this time they received reeducation from the peasants, which furthered their understanding of the direction to be taken by medical education. Such steps as these are intended to increase the tempo of the revolution in medical education and create a new type of socialist medical college that will concentrate on supplying personnel for

the countryside, and on prevention and cure of diseases prevalent in the countryside.

- 193 Taylor, H.E.,** *Notes: medical care, education and research in the People's Republic of China 1973 (HET).* n.p., 1973. 22p. Engl.

Unpublished document.

A Canadian physician observed medical care, education, and research while visiting China in 1973. At the Institute of Materia Medica (Academy of Medical Science) the main research efforts are to isolate, identify, test, and synthesize active ingredients of traditional Chinese medicines. The Ministry of Health implements Mao's policy of serving the people and taking health care to the countryside. By moving city doctors to the rural areas, organizing mobile medical teams, retraining nurses to do preventive and clinical work and training local personnel, about 100 000 health workers are now available in the countryside. The union of traditional with modern medicine is another priority. Preventive medicine (i.e. eradication of pests, environmental sanitation, immunization, and physical activity) has greatly improved health. Barefoot doctors' initial training varies from two months to one year, followed by continuing education at the commune hospital and from mobile teams of doctors. Production brigades have established a system of cooperative medicine. Research is oriented toward problems involving the majority of the people; its organization requires integration with its applied aspects and tackling problems at the local level. Institutes such as the Peking Maternity Hospital, and the Jui Chin Hospital, Shanghai, are discussed in addition to curriculum and admission requirements of medical schools.

- 194 Tchen, Tsi-min.,** *Growing strength of the army of medical workers in the Chinese People's Republic.* Sante Publique (Bucharest), 2, 1961, 171-175. Engl.

Reporting on public health in China as of 1961 the author states that mass health movements for destruction of the four pests, for health education and disease control have diminished morbidity caused by diseases such as schistosomiasis and kala-azar, and have improved health standards in towns and villages. From 1949 to 1960 about 60 000 doctors graduated from higher medical schools (seven times more than the number graduated between 1929 and 1949) and

200 000 auxiliary personnel graduated from intermediate schools (six times more than during the pre-Liberation period). The process of medical training after the Republic was established can be divided into three stages: 1) taking over and restructuring of the existing training institutions (1949-1952), 2) opening of new medical schools and alteration of curriculum (1952-1957), 3) setting the line for education to serve production (1958-1961). New doctors of traditional medicine and Western medicine are trained with both professional and unprofessional teachers, with increased importance attached to practical work and politico-ideologic studies. Students are asked to discuss teaching methods and teachers are urged to consult students. The policy of merging the two schools of medicine (Chinese national and Western) is implemented by including courses on both types of medicine in both types of medical school.

- 195 Thomson, R.K., MacKenzie, W.C.,** *Visit to the People's Republic of China.* Canadian Medical Association Journal (Toronto), 97, 12 Aug 1967, 349-360. Engl.

Visiting China in 1966 with the objective of observing medical research and medical practice, Canadian physicians report that their observations of medical education were limited by the Cultural Revolution, which had closed all secondary schools and universities. However, the following institutions were visited and are discussed (with respect to treatment, admission requirements, staff, etc.): Institute of Mental Health (Peking), Institute of Heart Disease at the Fu-wei Hospital, Institute of Industrial Health and Environmental and Nutritional Health, First Medical College of Peking, Research Institute of Acupuncture and Moxibustion, Institute of Vaccines and Biological Products, and in Canton the Lun Yat Lin Medical School. The medical facilities of a people's commune near Peking are described. There is some discussion of the Chinese Medical Association.

- 196 Wang, R.,** *Nursing in China.* American Journal of Chinese Medicine (New York), 2(1), 1974, 45-47. Engl.

Nursing in China is described in this article in relation to training, selection of candidates, and duties of these professionals. (Journal abstract.)

- 197 Wilenski, P.S.,** *Integration of the traditional Chinese practitioner.* Forthcoming in Medical Care Systems in Developing

Countries and the Chinese Approach, Contemporary China Series, Contemporary China Center, Australian National University, Canberra, Australia. Engl.

At the First National Health Conference the health policy planners of the People's Republic of China decided that cooperation between doctors of Western and traditional medicine should be one of the four guiding principles in medical work. The main problem with this policy lay in reorienting the thinking of university-trained doctors and health administrators to utilize the traditional practitioners rather than continuing to regard them as inferiors. A step toward unifying these personnel was the "Combined Practice" clinic, but by 1953 criticism was voiced over the lack of attention being paid to cooperation with traditional doctors. The stress on the intrinsic value of traditional medicine was greatly increased at the time of the Great Leap Forward, with some enforcement from the general line that the people, through self-reliance, could do better than experts. Thus more traditional doctors were trained, both at new schools and through apprenticeships. Western-trained doctors began genuinely to accept the traditional practitioners as colleagues, and the number of United Clinics rose rapidly, especially where the United Clinics were replaced by a commune-run Rural Health Centre. Reports indicate that eventually the two types of physician were mutually cooperative in hospital care of patients. Another asset of the revival of Chinese medicine lies in the low cost of herbal remedies. The value of these remedies, whether for their therapeutic or psychological effectiveness, cannot be overlooked. Although there is an emphasis on herbal medicine, the general trend since the mid-sixties has been to place less emphasis on the importance of traditional practitioners as such, because the preoccupation with medical experts, whether traditional or modern, as the central figures in health care delivery, has been overcome.

- 198 World Council of Churches, Geneva. Christian Medical Commission.** *Manpower for health care.* In Health Care in China: an Introduction, Geneva, World Council of Churches, Christian Medical Commission, 1974, 101-122. Engl.

China is pursuing three complementary ways of solving manpower problems: recruiting traditional practitioners, shortening higher medical education, and expanding the number of medical auxiliaries. The post-Cultural Revolution study programme at the Peking Medical College,

for instance, takes three years, during which time there are regular medical courses, military training, manual labour, practical work in rural areas, and hospital training. Although this system does not produce high quality doctors, it does a) rapidly increase the available medical manpower, b) enable medical educators to reevaluate medical courses, c) combine practical experience with classroom learning. At the beginning of the Cultural Revolution a renewed emphasis on rural health care originated the barefoot doctors who return to treat the common illnesses of the villagers following a four-month training period. The period of part work-part study training lasts three years. Barefoot doctors train subordinate medical personnel with even more limited duties, and are paid for their health tasks at the same rate as an agricultural labourer. Urban counterparts of the barefoot doctors are called "worker doctors" and "Red Guard" doctors, the former being factory workers and the latter being housewives. Other auxiliary personnel are public health workers, family health workers, and midwives. Mobile medical teams staffed by doctors, nurses, dieticians, laboratory workers, etc. are sent from the urban hospitals to rural areas, usually on a yearly basis. Their work includes training barefoot doctors, directing mass health campaigns, lecturing on health education, etc. Rural manpower is also supplemented by medical teams from the People's Liberation Army. Documentation from *China Reconstructs*, entitled *City Doctors Go to the Countryside*, and sections from the *Instruction Manual for Barefoot Doctors* are included in this chapter.

199 Yen, Fu-ching., *Medical training today.* China Reconstructs (Peking), 8, Jun 1959, 30-32. Engl.

In 1958-59 the First Medical College of Shanghai had a faculty of 610 full-time teachers and 3 685 students. It maintains six teaching hospitals and medical research is carried on in seven specially created institutes. The College's coordinated research programme on schistosomiasis

has been particularly successful. The Second Medical College has a total enrollment of 2 259 students, a faculty of 282 teachers, and three teaching hospitals. In addition Shanghai has an army medical college and one for traditional medicine. The Health Bureau of Shanghai municipality runs a large institute for the training of all types of secondary medical personnel, i.e. medical assistants, public health workers, nurses, and midwives. Medical education now includes field work and manual labour. Students and teachers leave the city to conduct special health campaigns, to help establish county health schools, give physical examinations, organize hygienic measures, etc. Acupuncture is included in the medical curriculum in keeping with efforts to combine the best of Chinese and Western teaching.

200 Yudkin, J., *Medicine and medical education in the New China.* Journal of Medical Education (Chicago), 33(7), Jul 1958, 517-522. Engl.

Reporting observations made in China in 1957, the author notes that there were 17 000 people officially engaged in dealing with schistosomiasis, which affected 12 million people. The public had become involved in the destruction of snails, and the prevention of water pollution, both measures in schistosomiasis control. Improvements in health standards and in the number of hospitals, medical centres, and clinics are noted. The greater number of physicians practicing were traditional Chinese doctors (360 000) in addition to 70 000 trained in Western medicine. Quantitative changes taking place in medical education were an increase in the number of medical students and in the size and number of medical schools. Courses were reduced to four or five years and modelled after the Russian pattern. Research in medicine that was being carried out by the older workers (i.e. in the Chinese Academy of Medical Sciences, Shanghai) was of a high standard.

V.1 Health Care Organization and Planning - General

See also: 059, 064, 073, 187, 188, 189, 483, 504, 512, 535

- 201 Allan, T., Gordon, S.,** *Scalpel, the sword: the story of Dr Norman Bethune.* Toronto, McClland and Stewart Ltd., 1971. 319p. Engl.

Dr Norman Bethune's biography includes detailed descriptions of his medical involvement in Spain during the war of the 1930's, where he began a blood transfusion service, and in China where until his death he helped the Communist forces in their battle to overthrow Chiang Kai-Shek's government.

- 202 American Consulate General, Hong Kong.** *Thousand urban medical workers settle down in the countryside: in response to the Party's call they go to the countryside to serve the peasant masses.* Selections from China Mainland Magazines (Hong Kong), (594), 25 Sep 1967, 12-14. Engl.

Translated from Shan-tung I-k'an (Shantung Medical Journal), (4), 5 Apr 1966.

In April 1966 the first group of medical and health workers totalling 1 946 proceeded to the rural areas, to set up mobile medical teams in Shantung province. Approved by the local Party committees and coming from hospitals at the provincial, administrative, district, and municipal levels, the group consisted of directors of departments, associate professors, specialists, traditional practitioners, Western physicians, assistants and nurses, pharmacists, chemists, etc.

- 203 American Friends Service Committee, Philadelphia.** *Experiment without precedent: some Quaker observations on China today.* Philadelphia, American Friends Service Committee, 1973. 58p. Engl.

Aspects of China discussed here include social change, welfare, social conformity, health services, economic development, and international relations. It is pointed out that China succeeds in reaching its health goals because of "wide acceptance of standards for human care and cooperation." In every institution the maintenance of the health of its members is a major goal. Its services include various combinations of specialists in Chinese medicine, specialists in Western

medicine, nurses, pharmacists, laboratory technicians, etc. Every person is entitled to any needed type of service; most people pay a small annual fee, but for others it may be free. Since disease prevention takes precedence over professional status and research, medical and health personnel cooperate as teams, traditional and Western physicians practice side by side, and physicians spend a part of every year working in the countryside. Through the Revolutionary Committee, medical and nonmedical staff at all levels are directly involved in the administration of health services. With respect to family planning, there is evidence that contraceptive methods and advice are available to all married couples, that marriage is commonly deferred until age 23-25 for women and age 25-28 for men, and that family planning is an integral part of health services.

- 204 American Medical News, Chicago.** *Inside look at Chinese medicine.* American Medical News (Chicago), 11 Oct 1971, 1, 10. Engl.

Returning from a visit in the People's Republic, Dr E. Grey Dimond reported that it was a "spotless nation," free of prostitution, drug abuse, alcoholism, and venereal disease. Hospitals appeared to have sophisticated equipment manufactured primarily in Shanghai, and about 95 of the drugs used were manufactured in China. The rural people have tremendous faith in traditional doctors whose practices are being combined with those of Western physicians. There has been a thrust of health care toward the people, with the result that medical and pharmaceutical education curricula have been cut in half, to speed up the training of personnel. Every medical student and faculty member must spend at least nine months of the three-year training period in mobile medical units. Barefoot doctors are present in every rural commune, where they are backed up by a well-equipped dispensary staffed by a pharmacist who is backed up by a commune hospital. Observations of acupuncture analgesia in surgery are reported. Government support of family planning and birth control is evident at the national level.

- 205 Baird, J.,** *Public health in China.* United Asia (Bombay), 8(2), Apr 1956, 114-116. Engl.

Since liberation, China has made tremendous advances in public health. Although health manpower is insufficient to meet the country's needs,

and there are not enough teaching colleges or teachers, existing medical institutes are expanding rapidly and new ones are being built. One of the larger medical colleges, the Shen-yang (Mukden) Medical Institute, has contributed to the reassessments of traditional Chinese medicine. At a smaller medical college, the Szechwan Medical Institute at Chengtu, fundamental research receives as much attention as the teaching load permits, in close affiliation with the corresponding university. Other medical colleges are similar to these but altogether insufficient numbers of doctors are being trained. Most people rely on traditional practitioners, whose centuries-old knowledge of drugs and therapy is remarkable.

- 206 Baltzan, D.M.,** *Medicine in China.* Canadian Medical Association Journal (Toronto), 93(21), 20 Nov 1965, 1118-1122. Engl.

A Canadian physician, having visited China in 1965, reports on the education of traditional and Western-trained physicians, the practice of medicine (salaries, specializations, etc.), aspects of the health services such as fees and hospitals, and medical organizations such as the Chinese Medical Association, the Academy of Medical Sciences, and the Union of Chinese Medical Workers.

- 207 Bernard, J.,** *Chine entre deux medecines. (China between two schools of medicine).* n.p., n.d. 9p. Fren.
Possibly published in *Le Monde*, 1972 or 1973.

A vigorous family planning programme is underway in China. Late marriages are encouraged, sex education is taught in schools, contraceptives are free, and abortion is free on demand. Since almost all young women work, day care centres for pre-school children of all ages are provided, and the authors note that children appeared healthy and robust. Medical students are selected on the basis of three criteria: 1) the decision of the applicant's commune, based on personal merit, character, aptitude, and moral attitudes; 2) judgement of fellow workers during the two-year work period in factory or agriculture; 3) results of an examination for the faculty of medicine, the candidates ideological merits and physical fitness. China trains "Western" physicians, traditional practitioners, medical auxiliaries, and barefoot doctors. There are about 1 400 000 barefoot doctors who render great service within their limitations. Since 1968 traditional Chinese medicine has been closely

associated with Western medicine. The practice of acupuncture and its use as an anaesthetic, as well as health conditions in general, are discussed.

- 208 Best, J.B.,** *Impressions of Chinese medical services.* Eastern Horizon (Hong Kong), 6(10), Oct 1967, 32-35. Engl.

Chinese medical services are unique in that Chinese traditional and Western medicine function side by side. Research into both branches of medicine is carried on extensively, the emphasis being placed on evaluation of Chinese traditional medicine on a scientific basis. The author observes that the general way of life and standards of morality are unique by Western standards. All this, as well as a state of cleanliness, has been brought about by the national use of the various mass media. The problem of venereal disease was dealt with by proscribing prostitution, instructing married couples, and prohibiting public displays or advertising of sex. Family planning was instituted and contraceptive advice given. Medicine is oriented to the rural areas by sending medical teams to the communes, where the basic unit of the medical service, the Health Centre, is located. Several clinical teaching hospitals were observed to be of equal standard with those in Australia. The author evaluates standards and work in medicine as at least on a par with Australia, but points out that they are breaking new ground. There is a great emphasis on research and medical education generally, and the medical service since 1949 has expanded to cover the whole country.

- 209 Best, J.B.,** *Wider view: impressions of a recent visit to China (April-May, 1966).* Medical Journal of Australia (Sydney), 2(26), 24 Dec 1966, 1242-1247. Engl.

An Australian physician describes medical facilities observed in China in 1966, and relates information supplied by the Chinese. Medical facilities observed include the following: a commune health centre, the Dees Chi Tan Hospital in Peking, the Drum Tower Hospital, Nanking, the Sing Wah Hospital, Shanghai, and the Sanatorium of the Chekiang Provincial Trade Unions, Hangchow. In a lengthy interview with Dr Ma Hai-teh (American-born physician George Hatem, now director of the Peking Institute of Dermatology and Venereology, as of 1966), China's mass campaign against venereal disease, and the administrative and financial aspects of the medical services were discussed. Dr J.S. Horn indicated that conditions for medical work in China

were very good, and that three types of Western medical courses were available (as opposed to traditional Chinese medicine). Aspects of the medical institutions described in this paper include hospital treatment, facilities, medical personnel, training, research, and mobile health units.

- 210 Blais, L.,** *Mao's revolution in public health.* Toronto, Atkinson College, York University, Mar 1974. 41p. Engl. Unpublished document.

This paper examines the unparalleled advances made in the field of health in the People's Republic of China since 1949. Although such a discussion necessitates a description and analysis of concrete public health problems and programmes, its central focus is on the political dimensions and dynamics that have characterized post-Liberation China and that were so integral a part of the fundamental changes in health policies. A preamble attempts to give a background to the complexity of health problems and to examine why these are not accorded higher priority in countries with limited resources. After a brief overview of health conditions in pre-Liberation China, the paper concentrates on the "Two Revolutions" in Chinese public health. The first, 1949-1960, attempts to analyze both the tremendous advances in health made by the Communists immediately after they came to power, as well as the internal political struggles that temporarily resulted in the de-radicalization of health policy. The second, 1960-1970, concentrates on the events that led to and culminated in what must be considered the most exciting developments that have ever taken place in the public health world. (Author abstract.)

- 211 Blakeslee, A.,** *Chinese medicine: a truly great leap forward.* Saturday Reviews (New York), 1, 23 Oct 1973, 70-73. Engl.

China now has over 1.3 million barefoot doctors, enough to assure almost the entire population of rudimentary medical care, and to refer difficult or serious cases to more sophisticated facilities. Many more doctors are needed and the shortage is being handled by reducing the period of training for physicians to three years. Urban physicians are required to spend a year or two in rural communes to learn firsthand about common needs, assist the barefoot doctors, and educate people about health. The Chinese system of medical and hospital insurance involves three segments: 1) all health costs are free for an individual and his dependents if he is a government

worker, student, or employed in a national-interest job, 2) factory workers' fees are paid by the factory, but the individual pays for half the cost of health care for dependents, 3) in rural areas, a small fee covers a family under the Cooperative Medical Service, and the commune supports health stations or clinics.

- 212 Bowers, J.Z.,** *Medicine in mainland China: red and rural.* Current Scene: Developments in Mainland China (Hong Kong), 8(12), 15 Jun 1970, 1-11. Engl.

Medical care and medical education in China emphasize improvement in the rural areas. The author outlines efforts to fuse developments in scientific medicine and *chung-i* (Chinese traditional medicine). Mao ordered "In medicine and public health, put the stress on the rural areas." This is being implemented for the rural poor by the "barefoot doctor," a basic level medical worker. Striking cures by the performance of acupuncture are reported, especially in cases of intestinal obstruction and in deaf-mutism, but these claims have not been tested by Western techniques. The mass migration of faculty and medical students to rural areas has increased steadily. Medical education and family planning are oriented toward the countryside. There are also changes in the delivery of health service systems; the aim is to develop rural cooperative medical services based in the communes. Striking success is reported in eradicating schistosomiasis and the author outlines procedures.

- 213 Bowers, J.Z.,** *History of public health in China to 1937.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 26-46. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

The development of public health care in China up to 1937 is traced with specific reference to the work of medical missionaries, the (American-funded) Chinese Foundation for the Promotion of Education and Culture, the Manchurian Plague Prevention Service, Peking Union Medical College and Nursing School, and developments in public health education. Research progress in parasitology, schistosomiasis, kala-azar, etc. is discussed, and some mention is made of

the role played by the League of Nations in China's national reconstruction movement. The outbreak of war in 1937 between China and Japan and the following conflict between Nationalists and Communists slowed down public health progress until 1950.

- 214 Bowers, J.Z.,** *Ping pong surgery*. Archives of Surgery (Chicago), 103, Sep 1971, 337-338. Engl.

China's surgery, medicine, and public health are receiving much attention, first because Mao Tse-tung propagandizes accomplishments in these fields to build national pride, and second because in China today one sees a unique programme designed to merge a system of indigenous medicine with modern Western medicine. The author expresses his interest in new surgical procedures, especially acupuncture, used in curing intestinal obstructions and deaf-mutism and as a sole anaesthetic in open-heart surgery, abortion, etc. The author points out, however, that no scientific basis for acupuncture has been proved. He suggests that the current popularity of restorative surgery has stemmed from China's historic emphasis on the intact human body. It is suggested that the "barefoot doctors" who serve in rural areas, would make an interesting study, as well as the Peking Union Medical College, which has the world's most successful programme in international medical education. Reports indicate that there is no question about major advances being made in public health in China, based in large part on health education. It is essential that Western doctors make an early, first-hand, objective study of China's system.

- 215 Bowers, J.Z.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Surgery past and present*. In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C. U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH) 73-67, 1973, 53-62. Engl.

Because the body was considered sacred and not to be marred, the Chinese traditional system of medicine did not include surgery. The first programme in academic surgery in China was established at the Peking Union Medical College (PUMC) in 1919. Today the Chinese place great emphasis on their accomplishments in restorative surgery. Some mention is made of Chinese surgical missionaries in Tibet and Africa, barefoot doctors, neurosurgery, and treatment of

fractures. References are listed at the end of the paper.

- 216 Bowers, J.Z., Purcell, E.F. eds.** National Library of Medicine, Baltimore, Md. Josiah Macy, Jr. Foundation, New York. *Medicine and society in China: report of a conference sponsored jointly by the National Library of Medicine and the Josiah Macy, Jr. Foundation*. New York, Josiah Macy, Jr. Foundation, 1974. 176p. Engl. Articles by R.F. Bridgman (entry 051), M.C. Oksenberg (entry 314), and V.W. Sidel (entry 345) have been abstracted separately.

Apart from the articles already mentioned above, i.e. those by Messrs Bridgman, Sidel, and Oksenberg, this conference report includes the following articles: Charles R. Boxer, *A Note on the Interaction of Portuguese and Chinese Medicine in Macao and Peking (16th-18th centuries)*; Jonathan D. Spence, *Aspects of the Western Medical Experience in China, 1850-1910*; Carl F. Nathan, *The Acceptance of Western Medicine in Early 20th century China: the story of the North Manchurian Plague Prevention Service*; John Z. Bowers, *American Private Aid at its Peak: Peking Union Medical College*; Mary B. Bullock, *A Brief Sketch of PUMC Graduates in the People's Republic of China*.

- 217 British Medical Journal, London.** *Medicine in China*. British Medical Journal (London), 24 Dec 1960, 1875-1876. Engl. Report on a speech delivered at the London School of Hygiene and Tropical Medicine on Dec 12, 1960, by Dr. Hsueh Kung-chuo, Vice-President of the Chinese Academy of Medical Science.

Speaking about medicine in China, the vice-president of the Chinese Academy of Medical Science said that the patriotic health campaign had centred around prevention, treatment, and eradication of the most important diseases with the result that some diseases had been eradicated and others were under control. The integration of traditional and Western medicine was progressing with the establishment of colleges and schools of traditional medicine, and with Western-style medical workers studying traditional medicine on a part-time basis. With the establishment of the people's communes a system of collective medical care was begun, assuring commune members health care for a small annual fee. Great importance was attached to maternal

and child health; maternity bed space was increased, midwives and child care workers were trained, and special considerations given to working women before and after childbirth. Dealing with medical education, it was reported that medical and pharmacological colleges had been established in all provinces, cities, and autonomous regions. In addition to the standard five-year medical course, six- and eight- year courses were introduced in 1959 to train research workers and teachers. As a result of industrial development, 90 percent of the national demand for drugs and appliances was being supplied domestically.

- 218 Cerny, J.,** *Chinese psychiatry*. International Journal of Psychiatry (New York), 1(2), Apr 1965, 229-247, and 1, Oct 1965, 648-649. Engl.

Followed by discussion written by Ezra Vogel, Demishagure, & Pow Meng Yap.

Neurology, psychiatry, and medical psychology are relatively new branches of Chinese medicine. Considerable emphasis is placed on prevention. In addition to the modern scientific treatment of mental disturbances, use is made of Chinese traditional medicine involving acupuncture, ignipuncture, breathing exercises, and medicines of vegetable and animal origin. Some research is currently being conducted on the effectiveness of these traditional methods in the treatment of mental illness. One hundred and eight references are listed at the end of the paper. (Journal abstract.)

- 219 Chao, Pu-yu.,** *To be a revolutionary health fighter boundlessly loyal to Chairman Mao*. Peking Review (Peking), 12(25), 20 Jun 1969, 7-9. Engl.

A medical orderly of the People's Liberation Army relates his increasing skill in acupuncture therapy, which he practiced on himself before administering to peasants and deaf-mutes. He reports a high degree of success at one school for the deaf and dumb.

- 220 Chen, W.Y.,** *Medicine and public health*. China Quarterly (London), (6), 1961, 153-69. Engl.

See also entries 221 and 222.

Pre-Communist China had only 12 000 doctors, 500 hospitals and 500 medical graduates every year. Because 84 percent of the total rural population could not pay for medical care, a system of state medicine was forged and put into effect

through an organization of county health centres. Medical education following Liberation has stressed quantity rather than quality, with an estimated 40 000 medical school graduates between 1950 and 1960, and graduates from secondary medical schools and secondary public health schools with two- to three-year-training number 153 000. An eight-year medical course has been established at the China Medical College, indicating that there is concern for quality as well as quantity in medical education. Traditional Chinese doctors have been made use of to increase medical manpower. Previously trained Western-type physicians have been given instruction in traditional methods, the long-term objective being unification of the two types of medical practice. All professional teachers and students must work for periods of time in field or factory, in an effort to correct the concentration of medical personnel in big cities. It is pointed out that great strides have been made in preventive medicine and sanitation. The government is striving to provide more hospitals and clinics in order to extend free medical care. Medical personnel are all government employees; fees for services are generally small. The system is organized into three levels; the municipal clinics (in cities) and health centres (in rural areas), the county or district hospital, and the specialized hospital operated by provincial government or medical colleges. Each commune has a health centre with a staff of doctors, nurses, technicians, and a maternal care nurse.

- 221 Chen, W.Y.,** *Medicine and public health*. In Gould, S.H., ed., *Sciences in Communist China*, Washington, D.C., American Association for the Advancement of Science, 1961, 383-408. Engl.

For abstract, see entries 220 and 222.

- 222 Chen, W.Y.,** *Medicine and public health in China today*. Public Health Reports (Washington, D.C.), 76(8), Aug 1961, 699-711. Engl.

See also entries 220 and 221.

Pre-Communist China was characterized by widespread poverty, disease, illiteracy, and a lack of physicians. In the past ten years (before 1961), emphasis on medical education has been on preventive medicine and public health. China Medical College, established in Peking in 1960 to offer eight years medical training as opposed to three, is evidence that the importance of quality as well as quantity has been realized. To increase medical manpower, traditional Chinese

physicians were included in health planning by the Communist government. Western-trained Chinese physicians were made to study Chinese traditional medicine and new institutes were established for training more traditional physicians. This integration is growing stronger rather than weaker. All professional teachers and students must go to the rural areas to work in factories or in the fields. This corrected the concentration of medical personnel in big cities. The author discusses medical books and journals published by the People's Medical Publishers in Peking. Progress in medicine has been seen in control of major parasitic infectious diseases (such as schistosomiasis) and in research of cardiovascular, respiratory, endocrine disease, occupational disease, etc. Some comprehensive reports and abstracts in the *Chinese Medical Journal* are recommended. Traditional medicine, in particular the art of acupuncture, is discussed, noting that good results have been reported in the treatment of nervous disorders, arthritis, facial paralysis, etc. Such pests as mosquitoes, flies, rats, and grain-eating sparrows have practically disappeared, following mass action campaigns. Improvement of environmental sanitation and practice of personal hygiene is remarkable. Small fees are charged for physician services, many receive free medical service, others pay only half their medical expenses. The system has three levels: 1) municipal clinics in cities, country health centres in rural areas; 2) district hospital; 3) specialized hospitals or health institutions. The commune is examined in detail, as an indicator of trends in the medical care system.

- 223 Cheng, T.O.,** *Medicine in modern China.* Journal of the American Geriatrics Society (Baltimore), 21(7), Jul 1973, 289-313. Engl.

The Chinese-born author gives an illustrated account of his visit to China in 1972, twenty-two years after he left that country in 1950. For the first time in her history China appears to be self-sufficient in taking care of the medical needs of her people. Among the many medical developments are the revitalization of traditional medicine, the emergence of "barefoot" doctors, the synthesis of insulin, the successful rejoining of severed limbs and fingers, family planning, the management of extensive burns, the successful treatment of choriocarcinoma by chemotherapy, and acupunctural anaesthesia. Of great significance is the apparent increase of coronary artery

disease among the Chinese. Whether the increased incidence is relative, due to more accurate diagnosis and longer life expectancy, or absolute, due to better nutrition and perhaps over-eating, is not yet certain. In contrast, the incidence of lung cancer has not shown an increase despite the prevalence of cigarette smoking among the Chinese. Cancer is one of the major killers; a constant campaign is waged for the early discovery of malignant tumors. Despite the twenty-three years of isolation, medicine in China is as modern as that in the United States, and physicians still speak the same language. (Journal abstract.)

- 224 Cheng, T.O.,** *View of modern Chinese medicine: observations by a Shanghai-born physician during his recent visit after 22 years of absence.* Annals of Internal Medicine (Philadelphia), 78, Feb 1973, 285-290. Engl.

As the fifth American, but the first Chinese-born, physician to have visited China in 22 years, I recount what I saw in modern China. Chinese medicine has made great strides in the past two decades, especially in the field of cardiology, which is my main interest. The frequency of coronary artery disease is definitely on the rise. Rheumatic heart disease is still prevalent. All types of congenital heart defects have been successfully repaired by open heart surgery with Chinese-made heart-lung machines. Cardiac surgery, either open or closed, is often performed under acupunctural anaesthesia. The latter is a typical example of what can be accomplished through the integration of traditional Chinese medicine and modern Western medicine. Today in China the two are combined in teaching, research, development, and patient care and work together in vigorously and effectively serving the health needs of the entire 700 million Chinese (Author abstract.)

- 225 Cheng, T.O.,** *Chinese actively seek out early malignant tumors.* Internal Medicine News and Diagnosis News (Washington, D.C.), 5(21), 1 Nov 1972, 3, 19, 22. Engl.

In China, much work has been done in cancer treatment, and the reattachment of severed limbs. Medical schools have undergone curricula reform, including a reduction from six to three years of training, and an emphasis on the practical aspects of medicine. Distribution and location of physicians are controlled by the hospital or commune in which they are trained. As of 1965, all members of the medical profession

have spent periods of time working in groups in the countryside, factories, mines, rural districts, etc. Some moved permanently; others joined medical teams. There are constant nation-wide physical fitness programmes in the form of mass calisthenics. The government's family planning programme is widely supported.

- 226 Cheng, T.O.,** *Other China medical advances transcend use of acupuncture.* Internal Medicine News and Diagnosis News (Washington, D.C.), 5(20), 15 Oct 1972, 1, 32. Engl.

Reporting on a brief visit to China in 1972, an American physician notes the altruistic attitude of medical work. Following Mao's revitalization of traditional medicine, acupuncture has become a widely used analgesic in surgical operations of the head, chest, abdomen, and limbs. Several advantages of acupuncture anaesthesia over parenteral anaesthetics are discussed, including the lack of side effects. Further studies must be conducted to better understand the physiological basis of acupuncture anaesthesia. Barefoot doctors, now numbering over one million, are part-time health-agricultural workers, contributing to health care in rural areas. They are considered peasants rather than physicians and are not included in statistics of health personnel. The barefoot doctors treat common illnesses, carry out immunizations, and keep health records. Mention is made of the mass campaigns that wiped out venereal disease, schistosomiasis, and kala-azar.

- 227 Cheng, T.O.,** *Changes in China.* New England Journal of Medicine (Boston), 287(5), 3 Aug 1972, 259. Engl.
Letter to the editor.

Following a return visit to China in 1972, the Chinese-born author notes vast changes in medicine, public health, industry, agriculture, and education. Particular aspects of medicine observed were surgery using acupuncture anaesthesia (at hospitals in Shanghai and Peking), severed limb restoration, treatment of deaf-mutes, etc.

- 228 Cherkasky, M.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Health care organization and health policy issues.* In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 22-39. Engl.

The administration and policy of China's health system are described. The organization of health services includes the Ministry of Health, where broad policy decisions are made, 21 provinces and five autonomous regions, and health bureaus with departments of health. Within each municipality there is a similar structure. The governing body in provinces and individual enterprises such as factories and communes is the Revolutionary Committee. Represented on the Revolutionary Committee are the army, cadres, and the masses. Other central organizations concerned with health care are the Chinese Medical Association, the Academy of Medical Sciences, and the Academy of Traditional Medicine. The purpose of the structure is to keep policy-making bodies from arriving at decisions in isolation; it appears that policy is in fact significantly affected by the needs of the population. The shortage of health manpower has been partially solved by basing a large proportion of medicine on traditional practices. In addition to doctors trained in Western medicine there are traditional practitioners of equal status and auxiliaries such as the barefoot doctors, worker doctors, and Red medical workers. Health services are available in rural areas at the commune and village level; in urban areas services are available at the lane, neighbourhood, factory, or school clinics. Financial aspects of health care are discussed.

- 229 Chien, Hsin-chung.,** *Chinese medicine: progress and achievements.* Peking Review (Peking), 7(9), 28 Feb 1964, 16-19. Engl.

Soon after Liberation, nationwide health campaigns were in progress, centering on wiping out the "four pests" (rats, flies, mosquitoes, and sparrows), and anti-epidemic stations were established to supervise sanitation work. By 1955, acute infectious diseases had been brought under control in the countryside, and research scientists turned their attention to the prevalent parasitic diseases. Advanced levels have been reached in treating patients with burns and severed limbs. Research on traditional medicine is taking place in accordance with the government policy of uniting Western and Chinese traditional medicine. By 1964, there were more than 80 medical and pharmaceutical colleges, as opposed to 20 at the time of Liberation. More than 110 000 doctors and pharmacists graduated from these schools in 14 years, the total number of trained medical personnel in 1964 being about 1 400 000.

- 230 Chin, H.,** *Zdravookhranenie kitaiskoi narodnoi respubliki. (Public health services in the People's Republic of China)*. Moscow, State Publishing House for Medical Literature, 1959. 266p. Russian.

Two aspects of health services in the People's Republic of China are discussed in detail: accomplishments of the health services in general and scientific medical research. The former covers founding principles of the health services, sanitary and anti-epidemic services, preventive medicine, medical-sanitary services for workers in factories, hygiene education, maternal child health, medical education, the pharmaceutical industry, and physical education and sports. The latter includes planning of science-research work, some problems of experimental and clinical medicine, problems of experimental and clinical oncology, problems of cardio-vascular surgery, parasitic and virus diseases, and medical facilities.

- 231 Chin, R.,** *Changing health conduct of the "new man"*. In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 113-123. Engl. Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

Three aspects of health conduct in China are examined: 1) criteria used by Chinese leaders for assessing health conduct, 2) the model of the utilization of knowledge — the process of dissemination, utilization, and change, and 3) the forces mobilized to push towards an increase in health conduct, in terms of both quality and quantity. Four evaluation criteria for health conduct are evident; medical health outcomes, the individual's acquisition of knowledge about diseases and health, improvements in health care organization as consistent with societal and political factors, and the individual's consciousness and world outlook. Innovation and modification in knowledge utilization have involved conscious adaptation of modern and traditional medical knowledge, the position of the consumer as the main beneficiary of the revolution, horizontal and vertical communication and decision-making, etc. Changing health conduct is being produced by forces intrinsic to the revolution; the procedures and forces in use are embedded in the whole framework of change in other sectors of the new society.

- 232 Chin, R., Chin, Ai-li.,** *Psychological research in Communist China: 1949-1966*. Cambridge, Mass., The M.I.T. Press, 1969. 274p. Engl.

Psychological research in Communist China is discussed in relation to the medical field, industry and labour, education, moral character, and individuality. The third chapter discusses medical psychology. Psychiatric facilities and personnel, psychiatry classification and terminology, mental health surveys, incidence and etiology of mental disease, treatment by Western and traditional methods, research in medical psychology, and Chinese cultural influences are topics of interest.

- 233 China Reconstructs, Peking.** *Bethune in China*. China Reconstructs (Peking), 17, Aug 1968, 32-36. Engl.

Dr Norman Bethune's work as a revolutionary medical practitioner in China is discussed in the context of an exhibition staged in his memory in 1967.

- 234 China Reconstructs, Peking.** *Proletarian doctor*. China Reconstructs (Peking), 20(8), Aug 1971, 22-23. Engl.

The work of a woman doctor of the People's Liberation Army is discussed. Her success as an innovative surgeon is attributed to deep proletarian feeling for her patients.

- 235 China Reconstructs, Peking.** *Drastic price cuts on medicines*. China Reconstructs (Peking), 19(1), Jan 1970, 26-27. Engl.

It is reported that in January 1970 drastic price reductions on medicines went into effect throughout China, bringing prices down to 80 percent below what they were in 1950. This strengthened the rural cooperative medical services. In keeping with Mao's philosophy of self-reliance, all production and scientific research in China has apparently made big headway. In addition to price cuts there has been standardization of prices throughout the country.

- 236 Clark, G.,** *Acupuncture and the party*. In Clark, G., *Impatient Giant: Red China Today*, New York, David McKay Co., Inc., 1959, 128-138. Engl.

Today, all of China's medical students must balance studies between herbs and antibiotics, between traditional and modern medical practices. Hospitals are divided into two sections, so patients may choose between traditional and modern treatment methods. There are several

reasons for the party's insistence on the virtues of traditional medicine; one relates to the mood of chauvinism, another to the low cost of herbal remedies as opposed to manufactured pharmaceuticals, and another stems from the shortages of modern physicians. One explanation has been that the government fears Western-trained men might be reluctant to recognize the party as the final authority whereas traditional doctors, steeped in mysticism, would be no threat to the system. Apparently the accent is not upon using the traditional doctor as a medical auxiliary or upon encouraging the old to accept the new, but upon forcing complete acceptance of native medicine. Acupuncture and moxibustion are two widely accepted traditional therapeutic methods. Herbal medicines are used and some scientific analysis of these prescriptions is being undertaken.

- 237 Cobb, W.M.,** *National Medical Association delegation's visit to the People's Republic of China.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 3-7. Engl.

During a 15-day visit to the People's Republic of China, in 1972, members of the National Medical Association observed health care delivery systems in hospitals, clinics of rural and urban communes, acupuncture treatment of deaf mutes, acupuncture anaesthesia for major surgery, and the education of all categories of health workers. In China the first step toward providing adequate health care for all the people began with a reorientation of the medical profession toward service of the people. This included abolishing degrees and shortening the medical curriculum. New categories of practitioners, such as barefoot doctors, and additional classes of health aides whose training may be less than that of the barefoot doctors render limited services in isolated areas. Population control measures have included contraceptive devices, abortion, and postponement of marriage. Tremendous attention is given to child care, with children as a result appearing happy and well nourished. Another observation was of good environmental sanitation in general, and the absence of alcoholism, venereal disease, prostitution, and crime.

- 238 Committee of Concerned Asian Scholars,** *Cambridge, Mass. Medicine.* In China! Inside the People's Republic, Committee of Concerned Asian Scholars, New York, Bantam Books, Inc., Mar 1972. 228-246. Engl.

China's first National Health Congress in 1950 established four basic guidelines for health activities: 1) health work should serve the workers, peasants, and soldiers, 2) the main emphasis should be placed on prevention, 3) traditional and modern doctors should work together, and 4) health work should be conducted by mass campaigns. Although great advances had been made in rural areas, as late as 1965 health resources were still concentrated in the city. With the new orientation of medical work to the rural areas in 1965, mobile medical teams of doctors, nurses, and health personnel from the large cities began appearing in the villages. In addition to treating patients, they trained barefoot doctors at the commune hospital to provide basic medical care at the village level. The barefoot doctors supervise vaccinations, improve sanitation methods, teach mothers about nutrition, etc. The training of midwives has decreased infant mortality and ensures that difficult births can be diagnosed for hospitalization. Cooperative medical services in the countryside guarantee low-cost health care for commune members. There is heavy reliance on herbal medicines, and other traditional Chinese treatment methods, including acupuncture therapy and acupuncture analgesia. Physicians are now trained for only three years after which there is an apprenticeship of another one-and-a-half years. More recent than the barefoot doctor training programme is the training of *Red Medical Workers* in urban and industrial areas.

- 239 Cooper, E.L.,** *Organization and delivery of health services in the People's Republic of China.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 18-20. Engl.

A visit to China in 1972 made several facts obvious: 1) the health of the people of China is inextricably bound to the development of Mao Tse-tung thought; 2) China has developed a system that delivers health care at all levels of society; 3) mass public health education has been superbly approached, resulting in an acute level of individual awareness; 4) a highly effective approach both to financing the health system, and to manpower development and mobilization has been accomplished by sharing the financial burden between the state and the "private sector," and by developing an accessible manpower pool of professional and nonprofessional personnel. The most fundamental step in health care was the decision to provide overall health care immediately, rather than gradually. The

Ministry of Health provides broad policy objectives for the delivery of health care in China, and aims at the development of rural health care systems as its first priority. The physical structure of the health care delivery system is described.

240 Cox, L.B., *Chinese medicine today.* Medical Journal of Australia (Sydney), 12 Oct 1957, 554-556. Engl.

As of 1957, China had 37 medical schools, 33 of which taught Western medicine and four of which taught traditional Chinese medicine; graduates of the former numbered about 7 000, and graduates of the second numbered around 400. Older Western-trained doctors continued to form the backbone of medical research. Medical curricula had been shortened in order to increase the number of physicians. Public health measures have strongly contributed to eradication of cholera, typhoid, typhus, and smallpox. The birth control campaign was reported to be underway.

241 Croizier, R.C., John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Traditional medicine as a basis for Chinese medical practice.* In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH) 73-67, 1973, 3-21. Engl.

China's medical past, its cultural and social position, and attitudes towards it among the populace and revolutionary leadership are discussed. Traditional medicine has a long and complicated history of involvement in other than purely medical issues. After 1949, the Communist government continued their policy of organizing the traditional medical practitioners as auxiliaries to the modern medical forces. Traditional medicine was a stopgap until it could be replaced by something better. In 1954 a significant shift in medical priorities raised the status of traditional medicine; traditional doctors were brought into hospitals and clinics and modern doctors were urged to cooperate with them. Facilities for training new traditional-style doctors were opened while modern-trained doctors studied it in the hope of becoming the new type of combined doctor. Praise and support for traditional medicine reached its peak during the Great Leap Forward, 1958-1959, but by the early 1960's it no longer dominated medical journals or general publicity. The two-track medical situation was

still in existence and modern medicine was the more important of the two. Traditional medicine's most important role was in the rural medical centres, where interchange of knowledge between traditional and modern doctors brought modern medical care to the villages. By 1965, Mao was urging "doctors to the countryside," and with the advent of the Cultural Revolution in 1966 the rotation of urban, medical personnel to rural areas and the training of barefoot doctors were given top priority. Few modern resources were at their disposal, so the barefoot doctors came to rely heavily on traditional methods. Rural medical cooperatives, with their emphasis on local self-reliance, also rely heavily on traditional medicine; thus the medical policies of the Cultural Revolution brought traditional medicine back into prominence. The author cautions that in traditional medicine our knowledge of China is far too fragmentary for anything more than educated guesses.

242 Croizier, R.C., *China Quarterly* (London), (23), Jul/Sep 1965, 1-27. Engl.

Almost immediately after their accession to power the Chinese Communist Party directed that traditional practitioners be united and their technical level raised. The transfer of traditional medicine from private practice to a more socialized form came through the United Clinic or United Hospital. Few Western-style doctors were integrated into these clinics. On the other hand, government medical institutions and modern hospitals absorbed practically no traditional doctors. In the latter part of 1954 a campaign to exalt the value of traditional medicine was begun, and a torrent of criticism and self-criticism was directed toward the thought reform of modern doctors. Traditional practitioners were not subjected to intensive criticism, but rather praised for their medical skills and correct political attitudes. After 1954 the stress was on integration of large numbers of old-style doctors into modern medical facilities. Modern hospitals added traditional doctors to their staff, and by 1957 government public health departments had incorporated 30 000 traditional doctors, and the Chinese Medical Association opened its doors to them. Research enjoyed considerable support, with the establishment in 1955 of the Chinese Medicine Research Institute of Peking. In the field of medical education, by 1956 the programme of training modern physicians in Chinese medicine had been systematized, and all medical schools were ordered to include courses in traditional medicine. Improvement schools for

giving traditional doctors some medical education were continued and new colleges of Chinese medicine were opened. The few months of late 1958 and early 1959 marked the flood tide of official promotion. Thereafter the modern medical profession has been moving toward a closer association with Chinese medicine, and the Party has encouraged "combined treatment" of diseases. As of 1965, a medical dichotomy still remains obvious in the persistent common usage of the names Western medicine and Chinese medicine.

- 243 Croizier, R.C.,** *Chinese communist attitudes toward traditional medicine.* Asia (New York), 5, Spring 1966, 70-77. Engl. Also appears in Croizier, R.C., ed., *China's Cultural Legacy and Communism*, N.Y., Praeger Publishers, 1970, 270-275.

The Communist Party in China supports traditional medicine and insists that it be integrated with modern Western medicine. After 1944, the half million traditional practitioners with their modern counterparts were organized into "health workers unions." New clinics and hospitals were built for the practice of Chinese medicine, and it began to be investigated for its possible contributions to the modern world. Although the major emphasis has been placed on training modern physicians, there are 21 colleges for traditional medicine. In addition, Chinese medicine has been given a significant role in the education of modern-style doctors. Since 1958, modern physicians were withdrawn from active practice to study for three years under traditional doctors — since then several classes of these dual-type doctors have been graduated. The reappraisal of Chinese medicine coincides with a general reemphasis on things distinctively Chinese. In terms of success, the Party's policy toward Chinese medicine shows little evidence of creating one new system of medicine. However, in terms of medical welfare, it has had certain benefits. Also by forcing the integration of Chinese and Western medicine, China's medical modernization has been accomplished more smoothly.

- 244 Current Scene, Hong Kong.** *Interview with Chinese medical doctor.* Current Scene: Developments in Mainland China (Hong Kong), 1(3), 12 Jun 1961, 1-12. Engl.

An experienced physician from mainland China relates details of life in Chinese hospitals and in the medical station of a rural commune.

- 245 Davidoff, G.,** *De la medecine et de la securite sociale en Chine. (Medicine and social security in China).* Population (Paris), 12(4), Oct-Dec 1957, 679-694. Fren.

This article is primarily concerned with the influence of Soviet planning in social security (and in particular the health services) in the People's Republic of China. Figures are provided for hospital facilities, dispensaries, polyclinics, anti-epidemic stations and the number of doctors available for the years 1950-1955. The extent of Soviet planning and assistance in the health sector is described in some detail.

- 246 de Haas, J.H., de Haas-Posthuma, J.H.,** *Sociomedical achievements in the People's Republic of China.* International Journal of Health Services (Farmingdale, N.Y.), 3(2), Spring 1973, 275-294. Engl.

The authors have had the unique opportunity of visiting China three times, in 1964, 1967, and 1971. Since Liberation in 1949, China has undergone metamorphoses from economic, social, and medical viewpoints. Living conditions have improved markedly. Vaccinations have eradicated common infectious diseases. Social diseases are disappearing, and venereal diseases have been eliminated. The state of general hygiene is good. Recent bumper harvests help to explain the good nutritional state of children, adolescents, and adults. The mortality of infants and preschool children has dropped sharply, leading to a drastic reduction in total mortality. Birth control efforts can be traced back to the middle 1950's. Late marriage and contraception are promoted, the latter including the pill, abortion, and sterilization. Since the decline of birth and death rates, the natural population increase is probably 20 per 1000. China's present population approaches 800 million. Mao Tse-tung's directive, "In medical and health work, put the stress on the rural areas," has been upheld since the Cultural Revolution. Practitioners of traditional medicine prescribe herbs and practice acupuncture for treatment and anaesthesia, methods that still await scientific evaluation. Medical education follows the same pattern as general education in that practice is given priority over theory. The organization of public health exhibits certain weaknesses, but the state of health of the population is incomparably better than in surrounding Asian countries or in China prior to Liberation. (Journal abstract.)

- 247 Den, Chi-su.,** *Successes of the Patriotic Health Movement for 1958.* Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii (Journal of Microbiology, Epidemiology and Immunology), (Moscow), 30(10), 1959, 17-22. Engl.

Measures taken to eliminate disease in China have included destruction of the four main pests, education in sanitation and hygiene, and the establishment of cleanliness as a habit among the people. Great advances have been recorded in the fight against infectious diseases: the massive support of the Chinese people is praised. The fight against pests is usually combined with agricultural measures. Examples are given of how peasants working together in thousands have killed rats in the fields and wiped out thousands of grain-eating sparrows. As a result of the elimination of pests, kala-azar and schistosomiasis have been eradicated. Malaria has been wiped out in 722 counties and malaria morbidity has dropped from 71 percent to .02 percent. Maternity homes in the communes have been set up and the infant mortality rate has decreased.

- 248 Depth News, Manila.** *China's success story in public health.* Depth News (Manila), 26 Aug 1972, 4p. Engl.

This news release compares the optimistic impressions of Western medical experts to China with Chinese press and radio reports for home consumption, and official claims over the past twenty years, concluding that grave health problems persist on a very wide scale in China. Examples are cited from the programmes launched against malaria and schistosomiasis. A description is also given of the multipronged mass campaign being waged for environmental health. Targets of the campaign, at the provincial level, are "five changes": cleaner drinking water, well-built privies, covered manure pits, fenced-in pigsties, and chimneys for kitchen stoves. At local level, the campaign is waged against "the four evils": 1) mosquitoes and flies; 2) contagious diseases; 3) open storage of human waste and animal manure; and 4) the trampling of crops by roving pigs. Campaigns in Kwangtung, Fukien, Kiangsu, and Kiangsi provinces are described. The supply, training, and utilization of barefoot doctors is also discussed.

- 249 Dimond, E.G.,** *More than herbs and acupuncture.* Saturday Review (New York), 18 Dec 1971, 17-19, 71. Engl.

During a visit to China, a Western physician observed Chinese physicians practicing exactly the same kind of medicine, in terms of diagnosis, with which he was familiar. He also observed striking differences, i.e. application of mass public health measures, eradication of prostitution, venereal disease, and alcoholism, and environmental sanitation. Government policy to provide inexpensive medical care in rural areas has been implemented by ordering one-third of all hospital staffs and one-third of all medical school staffs and students to be in the country at any given time. In urban medical centres, quality had not been sacrificed, but appeared to conform with international standards. In outpatient care, Chinese traditional medicine plays a large role. The new policy of combined traditional and modern scientific medicine has become national policy. Medical school curriculum now combines the two methods of medicine, and outpatient clinics of hospitals are staffed mainly by Chinese traditional physicians. Another essential member of the health care system is the barefoot doctor — a community first-aid man. Under supervision he distributes herbs, acupuncture, modern medicine and health education. The government's widespread incorporation of traditional medicine has made possible a broad health care programme.

- 250 Drobny, A.,** *Impressions on a visit to some health services in the Chinese People's Republic.* Bulletin of the Pan American Health Organization (Washington, D.C.), 7(4), 1973, 57-60. Engl.

Chinese health policy at the present time seems oriented toward preventing disease through vaccination and environmental sanitation, using family planning programmes to limit population growth, and integrating acupuncture and other practices of "traditional" Chinese medicine with modern methods. Medical students appear to receive relatively little specialized or theoretical training, most of their advanced education being practical in nature. Nor do their training colleges award degrees per se. Instead graduates simply go to the facility where they are assigned and the college informs this facility of their qualifications. China's large corps of auxiliaries or "barefoot doctors" are not prepared at the major medical training centres but in the field. This is done first through courses lasting three to six months, and then through in-service training spanning a three-year period. The primary function of these barefoot doctors is to administer vaccines, provide health education, treat simple illnesses, and oversee routine deliveries. Large numbers of

them are employed in China's communal health centres, several of which the author had an opportunity to observe at first hand. (Author abstract.)

- 251 Durdin, P.,** *Mao's revolution in public health*. Current Scene: Developments in Mainland China (Hong Kong), 6(7), 1 May 1968, 1-10. Engl.

In June 1965 Mao issued a directive for China's public health services to 1) renew emphasis on traditional Chinese medicine, 2) transfer many medical and public health workers from urban to rural areas. In addition, a proposal to change medical education standards was promoted. As a result, national, provincial, and municipal health authorities assigned additional personnel to the mobile medical teams, but avoided assigning doctors and health workers permanently to the countryside. However, it appeared in 1969 that the permanent placement of medical personnel was being effected. Mao's proposal to train health workers who can treat simple ailments may have merit, in that the majority of Chinese have more confidence in Chinese medicine than in Western medicine, and in its potential usefulness in implementing the birth control programme in the rural areas. The impression is that China must lower the quality of all medical training to provide a comprehensive health system for the entire population. From a long-range view, such a programme might prove self-defeating. The author also describes the ideological overlay in medical articles in China after 1965.

- 252 Effler, D.B.,** *Medicine in Red China*. Journal of Thoracic and Cardiovascular Surgery (St. Louis), 67(2), Feb 1974, 167-174. Engl.

A Western observer comments on mainland China's medical practice, health care delivery, and medical education. China's medicine blends the traditional with Western methods of diagnosis and therapy. Hospital facilities appear adequate, with the number of doctors, nurses, and auxiliary personnel totalling more than the patient volume. Surgical facilities, intensive care units, and burn units are of special interest. To bring health care to rural areas, a new medical labour force has been trained. These barefoot doctors have undergone brief but intensive periods of training; what they lack in formal medical education is in part compensated for by dedication, energy, and physical presence. In the field of public health, communicable diseases have been curtailed, and venereal disease and drug addiction

have been eliminated. Since the Cultural Revolution, the original medical curriculum of six years has been reduced to three, with the inclusion of political education. This observer feels that the long-term effects of the medical education policy will be a lower quality of medical practice. He also states that the basic motivation of patients to recover, and their total confidence in the medical care available (whether it be supplied by a barefoot doctor, traditional practitioner, or Western-style physician) must be considered as important factors in medicine in China.

- 253 Esposito, B.J.,** *Politics of medicine in the People's Republic of China*. Bulletin of the Atomic Scientists (Chicago), 28(10), Dec 1972, 4-9. Engl.

With the Cultural Revolution in China came intensified efforts to improve health standards. Doctors were urged to move to rural areas, mass campaigns for family planning and parasitic disease control were launched, traditional Chinese medicine in combination with Western techniques was stressed, and nonprofessional health personnel trained en masse. The People's Liberation Army has been involved in development of medical care (training health workers, mass health campaigns, establishing the cooperative medical system, promoting birth control, etc.). Mobile medical teams were sent to rural areas to establish clinics, conduct mass inoculations, train local health workers, etc. Urban medical personnel were transferred to rural districts. Traditional medicine assumed some importance in that the need for physicians could not be met by the number of Western-type doctors, and the length of time required to train such people is too long. By the end of 1966 almost all the medical schools had been forced to close down, but after 1969 some classes were reopened, many of the new students having previously been trained as "barefoot doctors." In 1968 a cooperative medical service began in which each commune member pays one yuan annual cooperative medical fee. Each production team makes an additional contribution for members who subscribe, etc. This new system has met some obstacles in the countryside, where farmers have been reluctant to join the cooperative because of mediocre service and short supplies. Training barefoot doctors has been an attempt to improve the health standards of the peasants. Low costs and short length of training period were major advantages of this approach. The barefoot doctor must be a politically astute peasant, with some knowledge of

common diseases and a willingness to return to his commune or factory as a part-time medical worker-producer. Medical assistants are less well trained than barefoot doctors, and fill the role of first aid personnel in emergency situations.

- 254 Esposito, B.J.,** *People's Liberation Army, medicine and the Cultural Revolution.* Marine Corps Gazette (Quantica, Va.), 55, Jun 1971, 1-7. Engl.

In 1967 the People's Liberation Army (PLA) of China moved into the development and expansion of medicine and public health. It has committed a sizeable portion of its medical forces to upgrading the level of medical services in rural areas. The PLA has sent medical units into rural areas of all provinces. They have conducted classes for "barefoot doctors" throughout China. These basic level medical workers are trained quickly and inexpensively, and are a step toward the workingclass' takeover of medical and health positions. The barefoot doctor trains for two to six months and then returns to the commune or factory as a labourer and medical practitioner. PLA teams have trained thousands of barefoot doctors, as well as medical assistants, lower echelon personnel with little more than simple first-aid knowledge. The PLA teams have assisted communes in establishing a "cooperative medical service" — each individual pays an annual medical fee of one yuan. Each production team pays ten fen for each member subscribing to the medical service. Each commune member pays five fen per treatment, with medicine free. PLA teams have been instrumental in mass health campaigns both among the civilian populace and within its own units. They have entered civilian hospitals, medical units, and medical schools to raise the ideological level of health personnel.

- 255 Far Eastern Economic Review, Hong Kong.** *Chinese medicine and the Communists.* Far Eastern Economic Review (Hong Kong), 17, 23 Dec 1954, 814-815. Engl.

Concerning the process of integrating traditional and Chinese medicine, a Chinese mainland source stated in 1954 that it would be accomplished only through long periods of cooperation between the two schools. The main drawback in Chinese medicine was its lack of scientific systematization; thus serious study and practice of Chinese medicine with the theories of modern science for the purpose of standardizing its theories and summarizing its clinical experiences was recommended. The Minister of Health stated

that the strengths of traditional medicine and the important role played by native doctors had not been fully recognized, but that there prevailed an attitude of contempt and prejudice towards native medicine.

- 256 FitzGerald, A., Wegman, M.E. eds.** Johnson Foundation, Racine, Wisc. *Health care in the People's Republic of China: Wingspread report.* Racine (Wisc.), Johnson Foundation, Nov 1973. 22p. Engl.

Wingspread Conference sponsored by National Committee on United States - China Relations and Committee on Scholarly Communication with the People's Republic of China of the National Academy of Sciences, in cooperation with the Johnson Foundation, Nov. 1973.

This conference report states conclusions drawn from discussion of the following aspects of health care in the People's Republic of China: political involvement, financing, data collection and availability, health services organization, "downward movement" (movement of health professionals to rural and remote communities), role of the People's Liberation Army, Chinese Medical Association, traditional medicine, medical education, and nursing schools, scientific research, family planning, disease control, and environmental policy.

- 257 Flato, C.,** *Barefoot and worker doctors plan key role in China's people-oriented health care system.* The Nation's Health (Washington), Nov 1972, 10-11. Engl.

See entries 155 and 258 for complete series.

China's medical care system is unique in its innovative recruitment, training, and use of paramedical personnel. The majority of health workers are indigenous, their medical duties are performed on a part-time basis, their training is fairly brief with an emphasis on practical experience and continuing education, there is upward mobility, and the scope and range of their various duties is considerable. Worker and barefoot doctors supplement activities of qualified physicians, working under their supervision. Their knowledge of both Western and traditional herbal medicines is extensive, and their diagnostic skills are well developed. Health facilities are located where readily accessible — within the production team in the countryside, and at lane and neighbourhood health stations in the city. All health services appear to be vertically organized, the simplest kind of care provided at the

base of the system. A typical health care station is described. Health education is conducted on a year-round basis, with frequent mass health campaigns for particular programs.

258 Flato, C., *Health care in top priorities of Chinese Revolution.* The Nation's Health (Washington), 2(6), Jun-Jul 1972, 1-4. Engl.

See entries 155 and 257 for complete series.

Health care in pre-Revolution China centered on a wealthy minority, malnutrition-related diseases were nearly endemic, parasitic infections almost universal, and so on. Visiting China after the Revolution, remarkable changes are noticed: venereal disease has been almost totally eliminated, drug addiction has disappeared, immunization has reduced childhood disease, the emphasis has shifted to preventive medicine, and comprehensive care has been instituted (it is either free or covered by cooperative plans). To meet the critical shortage of medical manpower, the number of years spent in medical school has been reduced to three years, and traditional practitioners have been incorporated into the medical system. The transition to rural-oriented medicine has resulted in the creation of the barefoot doctors. These are agricultural workers who, following training in basic medicine, treat common ailments, perform inoculations, and so on. They work under immediate direction of doctors from the commune and county hospitals. Visiting teams of doctors and nurses give continuous teaching to barefoot doctors.

259 Flato, C., *Medical revolution.* Nation (New York), 30 Oct 1972, 397-399. Engl.

Before 1949, China had one of the highest death rates in the world, an overwhelming infant mortality rate, and a life expectancy of 28-30 years. By 1972, tremendous gains had been made in improving health. This was achieved by increasing food supplies, improving housing and clothing, and controlling environmental sanitation. The medical services were rebuilt, beginning with the National Health Congress in 1950, where a programme to correct shortages in manpower, hospitals, and training establishments was drawn up. Although the USSR sent personnel, teachers, and essential drugs, and assisted in building new hospitals, Soviet-style medical care did not meet Chinese health care needs. However, some guidelines set at the 1950 convention have been retained, i.e. low-cost of free health services for the entire population, more medical

manpower, control of communicable disease, and mass campaigns in health education. During the Cultural Revolution of the mid 1960's, emphasis shifted from urban to rural medicine. This resulted in closing medical schools, sending faculty members to work in the fields, and altering medical education so that the emphasis was on "practical" medicine, and the length of training three years. Medicine is now highly decentralized: it operates as follows; 1) provincial departments and municipal health departments, responsible for sanitation, hospital administration, and finance, deployment of health workers to hospitals, health centres, etc.; 2) communes, subdivided into production brigades and work teams. Commune facilities include a hospital and specialized clinics. Production brigades have small hospitals with doctors and barefoot doctors. Health stations are visited by doctors from the hospitals on a rotating basis. In the cities, neighbourhood health centres provide basic medical care. China's medical care system is unique in its highly effective "regional" organization. Chinese medicine is of relatively high quality, and available to those who need it most.

260 Flato, C., *Serving the people: some observations on Chinese medicine.* Eastern Horizon (Hong Kong), 12(1), 1973, 50-54. Engl.

Tremendous strides have been made in improving the health of China's people. The government's first steps were to provide sufficient food, adequate housing, clothing, and sanitation services. The First National Health Congress in 1950 mapped out a comprehensive programme to correct chronic shortages of health workers, hospitals, clinics, and schools of medicine and nursing. During the Cultural Revolution, the emphasis for medical and health work shifted to the rural areas. Medical schools reopened after the Cultural Revolution with revolutionary committees as their governing bodies. The emphasis on theoretical medical teaching was abandoned in favour of practical medicine, and the years of training reduced from five or six to about three years. The framework of health services consists of provincial and municipal health departments, communes, production brigades, and production teams. Production brigades have their own small hospital staffed by fully qualified doctors and barefoot doctors; production teams as well as factories have health stations manned by barefoot and worker doctors. In the cities, neighbourhood health centres called lane or street stations provide basic medical care.

- 261 Fox, T.F.,** *New China: some medical impressions.* Lancet (London), 2, Nov 1957, 935-939, 995-999, 1053-1057. Engl.

It is reported that as early as 1957 China's traditional practitioners were working alongside Western-trained physicians in rural clinics, group practices, and large hospitals. Traditional drugs were being studied in scientific laboratories. The large majority of the people were still paying relatively high prices for drugs and operations. There existed an urgent need for doctors. In addition to increasing the number of medical schools, enrollment was increased and the years of study reduced to less than five. The freedom of graduates to pursue research was limited. As in Russia, there were no general practitioners but "specialists" working in groups. Many meetings of self-examination were being conducted by party members for the medical professionals. In cities like Shanghai the street committee was the group responsible for 1) administering welfare services, 2) explaining government policy, and 3) reflecting and transmitting citizens' opinions. The densely populated city areas appeared clean and free of flies, and citizens showed a knowledge of personal hygiene. The All-China Women's Federation and the Red Cross assisted the street committee in public health work. Three levels of primary medical care were recognized: 1) the doctors, traditional or otherwise, 2) a hospital run by a city, district or county, and 3) a hospital run by a city, province, or medical college. Primary medical care was given also to workers at factories, and to their families. In the countryside people depended mostly on traditional doctors. Hospitals were increasing in number, and their administration appeared to be primarily the task of doctors. Despite the victories accomplished in many other fields, some of the major diseases such as schistosomiasis and tuberculosis were still far from being eradicated. Sixty percent of births were taking place in hospitals, and the training of midwives had resulted in a reduced maternal and infant mortality rate. Extensive immunization programmes for children were in effect.

- 262 Freymond, A.,** *Chine 1971. (China 1971).* Zeitschrift für Krankenpflege (Berlin), 65(1), Jan 1972, 2-6. Fren.

During a one-month visit in China, the author observed public health measures, the training of medical workers, in particular barefoot doctors and nurses, medical teams, and the amalgamation in hospitals of Western and traditional Chinese medical procedures.

- 263 Freymond, A.,** *Cina 1971. (China 1971).* Professioni Infermieristiche (Turin), 25, Jan-Feb 1972, III-XI. Ital.

In this article Swiss health professionals who visited China in 1971 give their observations on the manner in which the Revolution has changed the practice of medicine. The concepts by which medicine has evolved and continues to evolve and the goals to be attained follow the thoughts of Mao Tse-tung. One of the aims of the Revolution was to put the medical sciences at everyone's reach. Chinese medicine admits that many aspects of Western medicine can be incorporated or blended with their traditional methods. Thousands of physicians and auxiliary health workers practice in almost inaccessible areas, treating cases, performing first aid, teaching the peasants and putting emphasis on basic prophylactic measures and even risking their own lives experimenting on themselves with untried acupuncture methods. By introducing and maintaining environmental sanitation principles and hygiene standards the health of the population has improved noticeably. The paper goes on to describe the training of paramedical personnel and the important role performed by the "barefoot doctor" who is also trained in combining Western with traditional Chinese medicine. The treatment of burns is amply discussed as well as the acupuncture technique; according to testimonial evidence gathered during the author's voyage, the latter technique is totally or partially responsible for the recovery and cure of deaf-mutes, paraplegics, and poliomyelitis patients (more than 6 000 cases). The use of herbal remedies is also described.

- 264 Galston, A.W.,** *Needles, herbs, and health for all.* In Galston, A.W., *Daily Life in People's China*, New York, Thomas Y. Crowell Co., 1973, 209-230. Engl.

The strongest point in favour of China's health system is its organization of medical care from the ground up. The basic unit is the neighbourhood health station. In the cities there are many street and lane health stations, with similar units in factories. In the countryside, every production unit has a one- or two-room health station, staffed by barefoot doctors (worker doctors in the city) who handle all preventive medicine and minor emergencies. They can readily detect and refer serious cases to larger medical facilities. The success of the barefoot or worker doctors can be attributed to the brief length of time needed to train them, and to their familiarity

through work with the people they serve. Inspiration for the use of medical paraprofessionals is said to have been the battlefield medical techniques of Norman Bethune. Facilities and personnel at the secondary level vary considerably from one region to another, but outpatients' services are standardized to include well-baby care, midwifery, immunology schedules, etc. The most highly trained and specialized personnel practice in the largest city hospitals. These personnel spend part of their time in the countryside to train barefoot doctors and to serve in outlying hospitals. Acupuncture is widely used in surgery as an analgesic, the effectiveness of which the author witnessed in several hospital operations. Changes in medical education since the Cultural Revolution have resulted in reduction of the course to three years, selection of students from a broader base, and alterations of curricula content with an emphasis on fewer and better courses interspersed with periods of manual work, military training, and physical fitness programmes.

265 Geiger, H.J., *Acupuncture and some lessons for the West*. New York Times (New York), 17 Mar 1974. Engl.

Book review of Sidel, V.W., and Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*; See entry 346.

The Sidel's book "Serve the People: Observations on Medicine in the People's Republic of China," is stated to be the most comprehensive report we have about the consequences of a major social revolution on the health of an oppressed people. The book focusses in depth on the health care system, with a full chapter on each of the major subsystems: rural health care, urban health care, medical education, treatment of mental illness, barefoot doctors, acupuncture, and herbal medicines. The attention paid to the altruistic dimension in China's health services makes the Sidel's report an important book especially for citizens in the West.

266 Geiger, H.J., *Putting China's medicine in perspective. Part I: health care for a fifth of the world*. Medical World News (New York), 18 May 1973, 43-49. Engl.

In Nanking, China, an American physician observes: well-nourished and warmly clothed people, environmental cleanliness, and adequate hospital care. Lane health stations (24-hour-a-day source of first-aid in the neighbourhood) refer people to the district hospital by way of a

neighbourhood health centre, which is equipped for outpatient care. The infant mortality rate of 1972 in Nanking was 15 per 1 000 on a par with leading developed countries. The delegation's trip to six cities and several rural areas made clear the following: 1) China has made great advances in the past 23 years, but still has far to go; 2) being a socialist society, health care is a collective activity; 3) health care priorities are the provision of a primary health care system for the entire population; 4) health progress has stemmed from improvements in social conditions, (i.e. availability of food, shelter, clothing) and from 5) mass campaigns to control and protect the environment; 6) universal accessibility (as observed in the cities) of primary medical care delivered by paraprofessionals; 7) crude birth rate has declined in larger cities to 6-7 per 1 000 and population growth to 1-2 percent; 8) health care is more limited in rural areas. In addition the eradication of venereal disease, alcoholism, smallpox, cholera, etc., and the control of measles, tuberculosis, polio, etc. is evident. Some deficiencies remain in the system, such as overcrowding in rural commune hospitals, slow progress of contraception in the countryside, although these stem from limited resources rather than from weakness in the health care system. The author related discussions with a physician on what steps were made in the mass eradication of venereal disease. Medical costs are paid by a workers' labour insurance program, a direct central government program, and a commune-based cooperative prepayment plan. Provincial and central governments pay for construction of health facilities and medical schools, training, public health, and family planning campaigns. In China cost is no barrier to health care.

267 Gibson, G., *Chinese medical practice and the thoughts of Chairman Mao*. Social Science and Medicine (Oxford), 6, Feb 1972, 67-90. Engl.

Comment by Susan B. Rifkin, pp.91-92, with reply by author, pp.92-93.

Using a general systems model this paper examines the role of political ideology, particularly the thoughts of Mao Tse-tung, in fulfilling the functional prerequisites of the Chinese health system. Materials from the Peking Review are utilized in analyzing the contribution of ideology as a guide to treatment priorities, basis for diagnosis and therapy, explanation of health care failures, rationale for health delivery systems, channel for

patient gratitude, justification for health, sensitivity training for health workers, basis for health ethnocentrism, and as motivational devices for health workers and patients. The case of China is offered as an example of social control over a key professional area through system input of ideological information, and of the barriers to such input in the American situation. (Journal abstract.)

268 Gingras, G., *Notes for an address by Dr G. Gingras, President, the Canadian Medical Association to the 1973 Annual Meeting of the Ontario Medical Association.* n.p., 1973. 16p. Engl.

Unpublished document.

Paper presented to the Ontario Medical Association, Annual Meeting, 1973.

Returning from a visit to the People's Republic of China in 1973, a Canadian physician notes that acupuncture does work, and does have a place in medicine in Canada. Development of surgical techniques (severed limb reimplantation) were observed to be remarkably successful. Acupuncture analgesia works well, but will not replace anaesthesia as we know it yet it has particular advantages over standard anaesthesia in many cases. It is effective on mature, stable patients. It is recommended that there be exchange of anaesthetists between Canada and China, and that basic research and clinical trials of acupuncture analgesia progress simultaneously, and that dentists should assess its potential value to their practice. Effectiveness of acupuncture as therapy was less impressive than its use as an analgesic. In particular, its use in cases of acquired and congenital deafness warrants scientific investigation. The quality of teaching observed in the Canton School for the Deaf was singularly impressive. Research programmes to isolate the active ingredients of traditional Chinese medicines are receiving high priority. Traditional Chinese medicines are frequently used in combination with antibiotics or other "Western drugs." In medical education, such changes as reducing physician education to a three-year period, admission of experienced nurses or other health workers to medical school have been instituted. University medical students have two years of work experience, are between 20 and 25 years old, single, have the endorsement of their commune or factory revolutionary committee, as well as necessary academic qualifications.

269 Gingras, G., *Preliminary public report, Canadian medical delegation visit to the*

People's Republic of China. Montreal, 1973. 10p. Engl.

Unpublished document.

A delegation of Canadian physicians to China in 1973 observed the effectiveness of acupuncture analgesia and suggest that it has a place in Canadian medical research and practice. This will come about through Canada-China exchange teaching fellowships. Its use in treating certain diseases and conditions was less impressive; for instance it was impossible to assess acupuncture's effective treatment of deaf children. Acupuncture's principal benefit is in pain relief. Chinese surgeons have made great advances in reimplantation of severed fingers (as well as limbs) and the treatment of burned patients. In rural areas, factories and farm communes, barefoot doctors (usually women, with two to twelve months training) are providing excellent basic medical care. Chinese traditional medicine is being combined with Western medicine to become a new type of medical care. Research is being conducted to determine the active ingredients of traditional medicines. In medical education the aim is to weld Western and Chinese traditional medicine and to shorten the medical training period to three years. Research programmes in which experienced nurses or other health workers are given special training to turn them into physicians are being conducted. Medical research is primarily of the practical variety, designed to solve actual medical problems in existence. In general it was observed that China is making remarkable progress especially in the delivery of basic health care to all parts of the country. Local communities (communes, factories, etc.) attempt to be as self-reliant as possible. Primary health care (including drugs and dental care), provided at the community level, is financed on a cooperative basis by all workers. Further care provided at the county, provincial, or teaching hospital is financed largely by the State.

270 Gingras, G., Geekie, D.A., *China report: health care in the world's most populous country.* Canadian Medical Association Journal (Toronto), 109(2), 21 Jul 1973, pages C-P. Engl.

In 1973, a delegation of Canadian physicians visiting China were impressed by the decentralization of China's health care delivery system, the stressing of community and personal self-reliance, and a complete service orientation. Concentration on providing health care in rural areas has resulted in thousands of physicians and other

health workers being transferred to outlying areas. Highly successful mass health campaigns have been organized at the community or factory level and health care is financed cooperatively. Personnel are paid varying salaries, according to responsibility and seniority. The delegation observed acupuncture analgesia in several major operations. This is used for 30 percent of all surgical procedures and is effective in over 90 percent of cases tried. Use of acupuncture as a treatment modality for disease was considerably less impressive. In recent years efforts to combine Western and traditional medicine have resulted in training of each type of physician in each type of medicine, and their frequent working together; however, their merging into a new type of medical practice will take years to achieve. Barefoot doctors, now about 1 million in number, work in rural communes and factory clinics, primarily on prevention, counselling, and treatment of common disorders. They work under close supervision and refer complicated cases to a physician. Effective family planning is vigorously promoted and implemented by provision of oral contraceptives and intrauterine devices; abortion is available on request. Early marriage is discouraged, prenatal care is supplied at clinics, and most babies are delivered by hospital staff. Working mothers (90 percent of Chinese women of childbearing age) have maternity leave with full pay. Immunization of infants is compulsory. Hospitals at the commune, county, provincial, and teaching levels range in size from 40 to 1 000 beds, and appear to have similar standards to those reached in Canada in the 1940's. Every commune and factory operates its own medical clinic(s) staffed by a variety of professional and nonprofessional health workers. Following the Cultural Revolution, medical schools began a reduced curriculum (from six to three years) and revised teaching methods. There are 90 colleges of Western medicine in China, with about 20 000 graduates each year. Ten Chinese traditional medical schools produce 5 000 - 6 000 in addition. The objective of medical education is to fully integrate traditional and Western medicine. Very little basic research is conducted in China at present; applied research is allocated a much higher priority.

- 271 Hayes, M.V.,** *Barefoot doctors: acupuncture and science.* In Hayes, M., *China Close-up: Life Styles of the 800 Million*, New York, Drake Publishers, 1972, 51-57. Engl.

A new kind of paramedical corps ("barefoot doctors" and "Red Guard doctors," as they are called) has been recruited from among the peasants and workers of China. The entire population has been enlisted as active participants in a drive to promote public health. Prior to 1949, infectious disease was rampant in China. Only 12 000 doctors and 70 000 hospital beds existed to serve one-quarter of mankind. Today, China has some 100 000 doctors scientifically trained in Western medicine and over 500 000 specializing in traditional Chinese medicine. This number is far from adequate, and to increase the supply colleges first reduced the eight-and six-year medical curriculum to four years and, recently, to three. Training includes Western and Chinese medicine, and special emphasis is placed on public health and disease prevention. China today has far from solved its medical problems. In decentralizing the administration and delivery of health care, the regime has inevitably disturbed the continuity and cumulative impact of long-term research. And as adequate diet and freedom from infectious disease bring long life to Chinese workers, cancer, heart disease, and respiratory ailments take over as the principal killers.

- 272 Horn, J.S.,** *Breakthrough tactics in Chinese surgery.* Eastern Horizon (Hong Kong), 3, Jan 1964, 32-34. Engl.

In China there is not necessarily a conflict between quantity and quality in the medical services. Rapid quantitative expansion following liberation and upgrading of quality through the "breakthrough" method are described. "Breakthrough" is essentially the concentration of many specialties on the solution of a specific problem (i.e. burn and amputee patients), the medical and nonmedical knowledge thus gained being transmitted widely for general use.

- 273 Horn, J.S.,** *Away with all pests: an English surgeon in People's China 1954-1969.* New York, Monthly Review Press, 1969. 192p. Engl.

Individual chapters have been abstracted separately under entries 112, 113, 424, 425, 471 and 472.

In this autobiography, a British physician relates his experiences in the health services of China from 1954 to 1969, describing living conditions, medical care, human relations between doctors and patients, traditional medicine, disease control (schistosomiasis and venereal disease in particular), progress in medical science, rural health

care, government policy on health, auxiliary health workers and barefoot doctors, and the Cultural Revolution.

- 274 Hsia, Tao-tai.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Laws on public health.* In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH) 73-67, 1973, 113-140. Engl.

The determination to improve the health of the Chinese populace through implementation of vigorous public health programmes was reaffirmed in the constitutional documents issued upon and after institution of the People's Republic of China, 1949. In addition, a large number of public health laws, regulations, directives, and decisions have been enacted. The most important of these legal norms on population health have been published in the two official statutory compilations of the Peking government. For discussion purposes, the author has selected 54 documents from these two compilations, for the purpose of demonstrating that Communist Chinese legal materials dealing with public health are of use not only to legal scholars but also to nonlegal scholars as valuable research materials. The documents discussed are grouped into three categories: 1) prevention and treatment; 2) medical and public health personnel and facilities; and 3) Chinese medicinal materials.

- 275 Hsui, F.P.,** *Medicine in China today.* Berita Jururawat: the Nursing Journal of Singapore (Singapore), 13(2), Nov 1973, 126-128. Engl.

After 1949 efforts were made in the People's Republic of China to increase the output of Western-trained doctors, so that by 1966 150 000 were trained but the problem of their concentration in urban areas remained. In the late 1950's training of indigenous personnel in the countryside had begun; these barefoot doctors were responsible for environmental sanitation, health education, immunization, first aid, etc. Midwives are responsible for antenatal and postnatal care as well as maternal and infant nutrition. Family planning utilizing the pill or loop is universally available. In all hospitals traditional practitioners and Western-trained physicians work side by side. Acupuncture is used as a form of therapy and as an anaesthesia. In medi-

cal education the emphasis is on the practical rather than the academic. Formal training of Western doctors is about three to four years, and may be followed by further training in traditional medicine. The training period for barefoot doctors is about six months.

- 276 Hsu, Tao-yi.,** *Serve the people heart and soul.* Peking Review (Peking), 12(24), 13 Jun 1969, 9-11. Engl.

Wholehearted service to the broad masses of the people seems to be fundamental in China's approach to health care. Under the guidance of Mao Tse-tung thought, health workers are inspired to perform tasks which, for less altruistic individuals, would never be attempted.

- 277 Hsu, Yun-pai.,** *Great victories for health.* China Reconstructs (Peking), 8, Mar 1959, 25-28. Engl.

Great improvements in sanitary conditions were brought about between 1956 and 1958. The four pests (flies, mosquitoes, mice, and sparrows) were eliminated, swamps were drained, wells and latrines were constructed. Mass efforts were undertaken, with a measure of success, to eliminate diseases such as schistosomiasis, cholera, plague, malaria, smallpox, etc. By the end of 1957 China had reportedly built up a national network of health and medical institutions, with at least one hospital in each county. The number of dispensaries, public clinics, factory and mine clinics, was ten times as many as in 1950. There were also 1 411 sanitary and anti-epidemic stations and 215 mobile teams. Hospital reform has resulted in medical workers doing their utmost to take the initiative for better patient care. Mother and child care and public education are given major attention. The government put forward a programme for the systematic study of traditional medicine. Many Western-trained doctors have been urged to study it, while at the same time more traditional doctors are being trained. Research concentrates on the elimination of pests and the most prevalent diseases in rural areas, and is guided by the policy of cooperation between Western and traditional medicine, combination of indigenous and foreign techniques, and interorganizational cooperation. By 1957 the Chinese pharmaceutical industry was supplying 80 percent of the required pharmaceuticals, which prior to 1953 were all imported.

- 278 Jain, K.K.,** *Amazing story of health care in New China.* Emmaus, Pa., Rodale Press, Inc., 1973. 184p. Engl.

First-hand experiences and some information from other physicians who have visited China are related. Topics discussed include the history of Chinese medicine, present efforts to combine Western medicine and traditional Chinese medicine, national health administration, medical manpower (barefoot doctors, nurses, physicians), hospitals and clinics, maternal child health, endemic disease control, acupuncture, moxibustion and herbal medicines, political ideology, and cultural aspects of Chinese life.

- 279 Jain, K.K.,** *Glimpses of Chinese medicine 1971: changes with the Cultural Revolution.* Canadian Medical Association Journal (Toronto), 106, Jan 1972, 46-50. Engl.

A Canadian physician records his observations during a visit to China in 1971. Health care is directed by the Ministry of Health in Peking, with commune hospitals controlling brigade and factory clinics, and complicated problems referred to regional hospitals in cities. Types of medical personnel are: 1) doctors of Western medicine prior to the Cultural Revolution and now being trained in Chinese medicine; 2) doctors of traditional Chinese medicine being taught Western medicine; 3) barefoot doctors (high school graduates with 6-12 months medical training, numbering 1 million in 1970); 4) nurses, similar to Western counterpart; 5) acupuncturists, general or specialized; 6) technicians, and 7) part-time health workers in communes — more than 3 million in 1970. Health facilities are accessible to all at little cost. Hygiene standards in general life appeared quite high. It is noted that: 1) the Chinese Medical Association is an active group; 2) medical schools, closed during the Cultural Revolution, are readmitting students; 3) research and publication, suspended during the Cultural Revolution, are now being given new consideration. Acupuncture anaesthesia has been developed to the extent of nearly replacing general anaesthesia.

- 280 John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md.** *Topics of study interest in Chinese medicine and public health: report of a planning meeting.* Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH) 72-395, 1972. 72p. Engl.

Planning meeting on topics of study interest in Chinese medicine and public health, Bethesda, Md., Mar. 15, 1972.

This is a summary of an informal planning meeting at which suggestions were made concerning future study in the following areas of Chinese medicine and public health; epidemiology of infectious and parasitic diseases, traumatology research, scientific basis of traditional medicine, research and production of pharmaceuticals, nutrition, population dynamics, and family planning, medical care in urban and rural areas, cancer research, and medical education, training, and manpower.

- 281 Jones, F.A.,** *Visit to China.* British Medical Journal (London), 9 Nov 1957, 1105-1107. Engl.

As of 1957 outside China's main cities medical care appeared to be largely undertaken by traditional practitioners. In addition there were some 70 000 Western-style doctors. In hospitals there was a department of traditional medicine. Peking Medical College is the largest medical school, admitting about 600 students a year, for a five-year curriculum. Since Liberation 860 new hospitals had been built, providing an additional 300 000 hospital beds. Doctors trained on Western lines were working in hospitals, polyclinics, and public health stations. Each large factory had its own medical service. Also discussed in this article are the pattern of disease and hygiene campaigns.

- 282 Kao, F.F.,** *China, Chinese medicine, and the Chinese medical system.* American Journal of Chinese Medicine (New York), 1(1), Jan 1973, 1-59. Engl.

This paper traces the history of Chinese medicine chronologically in terms of three developmental stages. In its infancy about three or four millennia ago, Chinese medicine was folk medicine. During the feudal stage of Chinese history, which lasted from about 1 000 B.C. to the beginning of the twentieth century, the folk medicine of China developed into systematic Chinese traditional medicine. This consisted of herbology, acupuncture, massage, exercise therapy, etc., and was based upon a self-consistent rigorous system of medical diagnosis and treatment. The third stage of development in Chinese medicine began with the introduction of Western medicine in the early 1800's when Western missionaries arrived in China. In this stage the integration of Western science and medical insight with Chinese traditional medicine inaugurated a new and more ecumenical medicine in China. Therefore, modern Chinese medicine is no longer referred to in

China as “Chung-I,” which means Chinese traditional medicine, but rather “Chung-Kuo-I-Hsueh” or New Chinese Medicine, signifying the amalgamation of ancient and modern as well as Western science and Eastern medical insight. The contemporary era of Chinese medicine dawned in 1949 when major changes began to occur. The author discusses the modern Chinese medical system in terms of the following three categories: training, delivery, and research. On the question of training he touches upon the general philosophy and curriculum of educating physicians and doctors. Concerning delivery he discusses the efficacy of the barefoot doctor concept, and with reference to research discusses primarily that being done along Western lines, and research aimed at putting Chinese traditional medicine on a scientific footing. In paraphrasing Yi Ke from the June 19, 1972 issue of *Peking Review* the author points out that “It has been estimated that in China professional medical doctors number about 200 000. Augmented by 200 000 nurses, 100 000 pharmacists, and one million barefoot doctors.” Forty-four references are listed at the end of the paper.

- 283 Kleinman, A.M.,** *Background and development of public health in China: an exploratory essay.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 5-25. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

In tracing the history of public health in China, the author begins with the historical and socio-cultural background of traditional Chinese medical systems. Modern China, beset at the turn of the century by a rapidly expanding population and worsening living conditions, established its first programme in public health in 1910, to control an epidemic of plague in Manchuria. The rural reconstruction movement, which lasted from 1937 until the Japanese invasion, gained support from Western missionaries, Chinese Christians, the Nationalist government and private foundations, while at the same time the Chinese Communist Party was also experimenting with public health programmes. Norman Bethune and George Hatem, both with Mao Tse-tung's Eight Route Army, were outstanding physicians in early public health campaigns. With

the birth of the People's Republic, a new direction for public health was suggested: use was to be made of all available scientific and technological inputs into public health, but social welfare, not science, was to be the prime orientation.

- 284 Kuo, Shu-su.,** *Using materialist dialectics to cure common diseases.* *Peking Review* (Peking), 12(36), 3 Sep 1969, 12-14, 18. Engl.

A doctor with the People's Liberation Army describes how he became a specialist in neurology, and how the thoughts of Mao Tse-tung are applicable in medicine and medical research.

- 285 La Dany, L.,** *Health for the millions.* *China News Analysis* (Hong Kong), (738), 3 Jan 1969, 1-7. Engl.

Writing of Chinese health services in 1969, the author states that both large and small hospitals have become the scenes of political purges, and revolutionary committees have replaced the old administrative bodies. Similar upheavals in the medical colleges are reported. In all aspects of life the army was being put forward as a model of action; resounding successes of People's Liberation Army medical teams are quoted from mainland sources. From this period of struggle have evolved the barefoot doctor and the cooperative medical service system. In this health insurance system individuals pay one yuan a year and the production brigade contributes an additional amount for each person. The author points out that for a man with a large family, health insurance for the whole family would take one-third of his income, and in such cases Mao's ideal of “health to the villages” is still unrealized.

- 286 La Dany, L.,** *Health.* *China News Analysis* (Hong Kong), (365), 24 Mar 1961, 1-7. Engl.

This report is a continuation of the preceding issue viz No. 364.

In 1960 China's minister for public health stated that 70 million cases of schistosomiasis, filariasis, tapeworm, and malaria were under treatment, and of these the greater part had been cured. Statistics quoted indicate dramatically effective treatment of schistosomiasis in particular. The number of doctors trained in the Western way by 1961 had reportedly reached 60 000, and traditional doctors had 80 000 apprentices. At the end of 1959 the combined number of people's commune hospitals, maternity homes, and public health stations was 200 000, and 60 percent of the county hospitals had opened public health

schools at the elementary or secondary level. The national press admitted the existence of epidemics officially for the first time in July 1960, and indicated that city doctors were shocked when confronted with the malnutrition and epidemic disease in the villages.

- 287 Lampton, D.M.,** *Struggle for health: group politics in China, 1949-1969*. Hong Kong, Centre for Asian Studies, University of Hong Kong, 1973. 34p. Engl.
Prepared for a seminar on contemporary China "Ideology and Organization", University of Hong Kong, Saturday, Jan. 13, 1973.

The purpose of this study is stated as an attempt to explain changes in China's health care action policy over time. Changes in health care policy have been reflected in the length and quality of medical education, in the conditions of physician employment, in the type of medical research encouraged and permitted, in the changing status of traditional practitioners, etc. The reasons for changes in the health care action policy are said to be found in the changing coalitions that basic social groups (the medical profession, the Party and government, urban dwellers, rural dwellers) formed in order to achieve their objectives. Each of these groups has its own set of objectives regarding the health care system; each group also has a set of political resources it can devote to achieving its ends. As the political system changes, so does the utility of each group's resources and the relative strengths among the groups.

- 288 Lampton, D.M.,** *Public health and politics in China's past two decades*. Health Services Reports (Washington, D.C.), 87(10), Dec 1972, 895-904. Engl.
A shorter version of this paper appears in *Understanding China Newsletter* (Ann Arbor, Mich.) 10(1), Jan-Feb 1974, pages 1, 7-9.

An outline is given of health problems facing the Communists in China in 1949 and the results of some of their efforts. Developments in the health care system until 1957 are described; during this time many significant mass health programmes were initiated against infectious disease, pests, and sanitation problems. The communes extended health care to areas where peasants lived, and the medical education curriculum was shortened to satisfy the demand for medical personnel. Developments during the Great Leap Forward, and the three years following, are dis-

cussed. Prior to the Cultural Revolution, Mao criticized the existing health care delivery system for having a) too much pure research, b) insufficient preventive care, c) not repaired the communal health care system, d) slighted traditional Chinese medicine, etc. Early in the Cultural Revolution, the People's Liberation Army became the primary model for delivery of health care. Tachai, a famous commune in northwest China became a model by establishing its own school for barefoot doctors. Simultaneously a rural co-operative health care system was being developed, along with a new method for financing the plan. In conclusion the primary features of the Chinese experience that have relevance for the United States are: 1) the Chinese have substantial experience in training and utilization of paramedical personnel; 2) the United States needs a graduated health care structure, ranging from local health centres to urban medical centres; 3) discussion of medical education and criteria for admission into medical schools; 4) allocation of scarce research resources to meet the most pressing health care needs of the people; 5) health care financing, and the relationships between government and private sectors in this financing.

- 289 Lavernhe, J.,** *Pensee de Mao Tse-tung dans la medecine chinoise contemporaine. (The thoughts of Mao Tse-tung in contemporary Chinese medicine)*. Presse Medicale (Paris), 77(7), 8 Feb 1969, 231-232. Fren.

Taken from an article originally published in *China's Medicine*, August 1968, this item deals sparingly with purely medical facts in favour of information of a political nature. Mao Tse-tung's thoughts as they influence medicine in contemporary (1969) China are quoted.

- 290 Le Bosse, J.,** *Quelques aspects de la sante en Chine. (Various aspects of health in China)*. Revue de l'Infirmiere (Paris), 23, Oct 1973, 740-741. Fren.

Several aspects of health and medicine in China are briefly discussed: psychiatry, preventive medicine, barefoot doctors, worker doctors, financial aspects of health services, and maternal and child health.

- 291 Lee, Tsung-ying.,** *Eastern diary.* Eastern Horizon (Hong Kong), 12(1), 1973, 2-6. Engl.

Following a brief look at the history of Chinese medicine, the author concludes that traditional medicine is a valuable storehouse of medical experience, and that it should be practiced side by side with modern medicine. It is envisaged that by practicing the two side by side a synthesis will eventually occur and by that time a new medicine will have come into being. Other new features have evolved since the emphasis in medical service shifted to the rural areas; here the barefoot doctors and the cooperative medical service are improving the health of the peasants.

- 292 Leger, J.,** *Rapport preliminaire de mes impressions comme membre de la delegation medicale canadienne en Chine et en particulier sur ce que j'ai pu observer sur le radiodiagnostic, la radiotherapie....* (Preliminary report of my impressions as a member of the Canadian medical delegation in China, and in particular what I observed on X-ray diagnosis, radiotherapy...). Montreal, Institut de Cancer de Montreal. 1973. 14p. Fren.

Unpublished document.

A Canadian doctor, visiting China in 1973, having observed demonstrations of acupuncture analgesia, concludes that this technique is valuable even though its mechanism is still without scientific explanation. Doctors and surgeons who were treating severe burns and performing limb reimplantations were excellent Western physicians as opposed to the traditional acupuncturists. The author expresses some skepticism about the medical system at the rural commune level and the urban communes in the working districts of Shanghai or in the factories of Shanghai and Peking. The medical care given by the "barefoot doctors" appeared quite inadequate. Hospitals, and dispensaries or clinics in industry and communes, appeared very efficient. The only good point in favour of this system (of paramedical personnel) is the fact that the entire population is readily able to turn to someone, whether competent or not, prepared to listen and sympathize while trying to comfort. It seems that the peasant, the worker, and the soldier are satisfied in being able to visit a health worker when it is necessary. Systematic visits to remote areas by doctors or teams of physicians from large hospitals is an excellent scheme that Canada should attempt to implement as effectively as possible. Research undertaken by the Institute of Materia

Medica in Peking, where efforts are being made to isolate the active ingredients of thousands of plants used by traditional physicians will transform an empirical medicine into a scientific one, more rational and effective. The Cultural Revolution seems to have had disastrous effects on medical education and on the medical specializations. In the schools of medicine of Canton and Shanghai, excellent teaching material in the departments of anatomy and pathology were observed, but no other departments were open to visitors. As a radiologist, the author wished to evaluate the place of radio-diagnosis radiotherapy and the fight against cancer, but he discovered little, and that with difficulty. Hospitals and clinics visited are listed chronologically, with observations of surgical and therapeutic procedures, equipment, hospital organization. He concludes that radiology, radiotherapy and nuclear medicine are not one of the strengths of the Chinese medical system. This specialty is still considered a luxury; the doctors who practice it appeared to be competent.

- 293 Li, Teh-chuan.,** *New tasks for the protection of public health.* Peking, Ministry of Public Health, 1956. 6p. Engl.

Report delivered to the 3rd session of the First National People's Congress on June 1, 1956.

Great progress in the field of public health is reported by China's Minister of Public Health. At a national conference on health, convened in 1956, plans for the elimination of the most serious diseases within a 12-year period were formulated. These diseases included schistosomiasis, bubonic plague, and malaria. The decision to have practitioners of Western medicine study traditional Chinese medicine, in an effort to promote the "new medical practice" of China is discussed. Plans to include courses in traditional medicine in the higher medical institutions, establishment of Colleges of Traditional Medicine in Shanghai, Canton, Chengtu, and Peking, and establishment of the Traditional Medicine Research Institute are mentioned. The need for basic level medical facilities especially in rural areas is pointed out; progress in the reorganization of public health was still behind the demands of the situation.

- 294 Li, Teh-chuan.,** *Placing health undertakings at the service of production.* Current Background (Hong Kong), (577), 14 May 1959, 18-22. Engl.

Speech delivered to the 1st session of the

2nd National People's Congress on April 27, 1959, Peking.

Progress made in the health field during the 1950's is praised; through the actions of the whole population, a large number of pests had been destroyed, and in some areas had been eliminated entirely. Improved sanitation contributed to reduced incidence of contagious diseases. By 1957 hospitals were established in all counties, and the total hospital bed capacity of the country had increased to 440 000 by 1958. People's communes had begun to establish hospitals, large-group production units established health centres and clinics, and small-group production units had health personnel. Prevention work had been launched with hospitals as the centres of the movement. Increased cooperation between traditional and Western practitioners, and training of physicians of both schools are mentioned. The stated goals for medicine and public health, as of 1959, concern continuing development of the patriotic health campaign and collective health care, and strengthening the cooperation between Western-style and traditional practitioners in eliminating disease and developing medical science.

- 295 Liang, M.H., Eichling, P.S., Fine, L.J., Annas, G.J.,** *Chinese health care: determinants of the system.* American Journal of Public Health (New York), 63(2), Feb 1973, 102-110. Engl.
Also appears in *Ekistics* (Athens), 37(220), Mar 1974, 206-211.

China's health care system is discussed with respect to 1) major problems confronting the Communists in 1949; 2) economic, political, cultural, and legal determinants; 3) evolution of the system to the present day (1973); 4) the current system; and 5) areas in which our knowledge of the Chinese system is lacking. It is noted that mobile medical teams provide "expert" technical backup for the barefoot doctor in providing preventive and therapeutic services, training new auxiliary personnel from the village, etc. Teams dealing with birth control, hygiene, epidemic control, etc. provide immediate resources for village-level health workers. The health system is dependent on the individual peasant, in that the effectiveness of mass action is dependent on peasants' personal motivation to improve local village conditions. The author warns that limitations in this system do exist, and that much remains to be learned about it. If China's system is to be considered as a model for other developing

countries it must be remembered that this transposition would depend on major changes of political systems with commitment to new ideologies.

- 296 Liao, S.J.,** *Medicine in China today.* Connecticut Medicine (New Haven), 38(1), Jan 1974, 39-42. Engl.

In the health field, China has made great strides in the past 20 years, bringing venereal diseases and drug addiction under control, overcoming malnutrition, and establishing clinics in factories, communes and city neighbourhoods, from which referral of serious cases to county hospitals, provincial, or teaching hospitals is possible. From the latter two types of centres, mobile health units are sent to the factory, commune, and neighbourhood clinics to assist and teach local physicians. Barefoot doctors and Red Medical Guards have regular production jobs and perform basic medical tasks when the need arises. At a teaching hospital they are given three months training in preventive medicine and the traditional and scientific approaches to treating common illnesses. Changes have taken place in the education of regular physicians, with a reduced three-year programme consisting of one year in basic medical sciences, one year in clinical studies, one year of internship. The best of traditional Chinese medicine is being amalgamated with Western medical techniques, and hospitals usually specialize in one form or the other but not to the exclusion of either. Pharmacies distribute both Western medicines and traditional herbal remedies. Acupuncture anaesthesia and the use of splints in the treatment of fractures are two examples of the combined Western and traditional techniques.

- 297 Lin, Tsung-yi., Wegman, M.E.,** *Present status and future perspectives.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 259-272. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

Conclusions drawn from information presented at a conference on public health in China, stress the high priority occupied by health issues in the national politics and administration of China. A characteristic feature of Chinese public health is that it constitutes an integral part of the overall

social system; health programmes and health conduct are highly political activities; full-fledged integration of traditional and Western medicine seems to be at hand; local communities have assumed responsibility for their own health programmes. Several questions still remain unanswered. Some of these stem from insufficient data on the results of health work so far and on the working of the health system. Others concern the future of public health and ask whether health will continue as an important facet of development in China, whether the emphasis will shift from control of infectious disease to chronic disease control, what the trade-offs have been between quantity and quality in the Chinese approach to health, and how the Chinese model can be utilized to advantage by other countries.

298 Ling, Yang., *Integrating Chinese and Western medicine.* Peking Review (Peking), (1), 23 Dec 1958, 21-23. Engl.

The integration of Western medicine and traditional Chinese medicine has been part of the policy guiding medical work in China. In 1958 a Communist Party directive called for the establishment of special courses in the various provinces and cities. These would enroll medical college graduates and train them as skilled practitioners of traditional medicine. The training of young apprentices in Chinese medicine was also being increased, and a nationwide campaign to collect secret prescriptions from people of all walks of life was in progress. At the National Conference on Traditional Chinese Medicine, it was decided that all medical workers trained along Western lines would be urged to study traditional medicine, and that work would go on for the collection of large numbers of reliable traditional prescriptions.

299 Liu, Jun-hua., *Let deaf mutes hear the voice of Chairman Mao.* Chinese Literature (Peking), (7/8), 1968, 77-88. Engl.

A soldier of the People's Liberation Army (PLA) relates how Chairman Mao's directive to "heal the wounded, rescue the dying, practice revolutionary humanitarianism" inspired him to treat deaf-mutes. His experiments toward finding the most effective application of acupuncture therapy as a cure for deaf-mutism are described in detail. It is claimed that in a two-year period, 60 deaf-mutes were cured by PLA medical workers.

300 Loh, T., *Some impressions of Chinese medicine.* In Loh, T., ed., *China Through Australian Eyes*, Victoria, Australia, New Democratic Publishers, 1973, 1-10. Engl.

In Chinese hospitals the author found evidence of the integration of Western and traditional medicine. In medical schools such as the Liaoning Medical College of Traditional Medicine, students learn various aspects of traditional medicine, medical theories, pharmacology, clinical practice, and ancient traditional treatises apart from Western scientific subjects. Since 1958 acupuncture has been used as anaesthesia for some surgical operations with good results. The author witnessed several operations performed using this type of anaesthesia. At the Darien Deaf-Mute School in Manchuria, evidence of full recovery with acupuncture therapy was presented to the author. Medical training is paid for by the state; students spend 70 percent of their time in medical studies, 20 percent in political studies, five percent in military training and five percent in labour. Length of study is now an experimental three years. Graduate physicians are assigned a position by the state. Medical care for factory workers and their dependents is free; cadres receive free treatment but have to pay half of the cost for dependents. For those who have to pay, costs appear minimal, and in the rural areas a cooperative medical scheme operates. Barefoot doctors play an important part in the medical care of the rural population. The building of hospitals, clinics, and the increase in supply of medical equipment and drugs have been greatly stepped up. Venereal disease has been eradicated, schistosomiasis is being brought under control, and family planning is being promoted in both the urban and rural areas.

301 Lu, Chih-chun., *Chinese Medicine.* People's China (Peking), 9, 1 May 1956, 35-40. Engl.

Ancient treatises on Chinese medicine are being studied, and modern scientific knowledge is being applied to Chinese medical science to draw on its store of clinical experience. This policy is resulting in great medical changes in the People's Republic. Doctors practicing Western and Chinese medicine have joined forces, sharing such work as vaccinations. Many formerly secret methods have been made public by traditional practitioners. Hospitals and clinics staffed by doctors of the traditional school have been established; the majority of them have their own chemical laboratories and doctors practicing

Western medicine are invited for consultation. In hospitals where Western medicine is used there are departments of Chinese medicine. Medical colleges and schools of pharmacy are carrying out research into traditional Chinese medicine and pharmacology, discarding worthless aspects, and incorporating others into medical curricula. As of 1956 some 2 000 medical substances listed in *Li Shih-chen's Materia Medica* had been systematically analyzed and in many cases their efficacy had been proven beyond doubt.

- 302 Lu, Wei-po., Yu, Yung-ching.,** *Learning from ancient China's medicine.* China Reconstructs (Peking), 8, Oct 1959, 32-34. Engl.

In China's attempt to synthesize traditional medicine, with modern Western medicine, the emphasis is on the study of the former by modern-trained doctors. In 1959 special courses were offered for medical graduates with two or three years' clinical experience, lasting two and one-half years at the Research Institute for Chinese Traditional Medicine in Peking. Two graduates of the course give a brief outline of their studies.

- 303 Maddin, S.,** *Medicine in China today.* Eastern Horizon (Hong Kong), 11(6), 1972, 31-36. Engl.

A Western observer notes that the Chinese medical curriculum has been reduced to three years, by deleting courses that were deemed unnecessary. Students are selected from high school graduates who have worked for several years, or from barefoot doctors, nurses, etc. with practical experience in medical work. There has been a dramatic improvement of medical services in the rural areas. Almost 80 percent of all physicians have spent some time in the rural areas and about 15-20 percent of all hospital professional staff are working away from their base hospital at any one time on a rotation basis. Efforts to combine traditional medicine with modern medicine are evidenced by the use of acupuncture (both as a therapeutic method and for surgical anaesthesia) and the increasing reliance on herbal medicines. Public health in the communes relies heavily on the barefoot doctors, and peasants are trained to give medical treatment locally without leaving their farm work. Each worker in a commune pays about 14 cents (U.S.) each month to belong to the production brigade. Each brigade has its own health station and pharmacy.

- 304 McLennan, H.,** *Canadian visitor sees medicine in China and is impressed.* Science

Forum (Toronto), 6(5), Oct 1973, 23-25. Engl.

The role of the commune hospitals, country hospitals, and large provincial or urban hospitals is discussed. A special function of the larger hospital is to despatch medical teams of ten or more physicians and paramedical personnel to spend a year in the countryside. They also provide continuing medical education for barefoot doctors of the communes and collect epidemiological data. Although financing and the selection of those to receive training as barefoot doctors or to enter the medical colleges is a communal matter, the curriculum followed by the student physician is part of one important area where the powers of the central government are evident. In the past few years there has been an imposed movement to integrate "Western-oriented" and "traditional Chinese" medicine both in training and in practice. Massive education campaigns, disseminated from the federal Ministry of Public Health in Peking, through all levels of the health care pyramid, have virtually eliminated disease in China, and have instilled a pride in personal hygiene and physical fitness in the Chinese people. They could only succeed under a system where the central authority can rely upon having its directives followed in the smallest remote village as well as in large cities. One of the main shortcomings of the Chinese health delivery system is that the standard of hospital equipment is in the main not high. Other areas that require urgent attention are public education and applied research.

- 305 MD Medical News Magazine, New York.** *Chinese medicine: yesterday and today.* MD Medical News Magazine (New York), 2(4), Apr 1958, 30-35. Engl.

Traditional Chinese therapeutics and modern Western medicine operate side by side in Communist China. With only about 70 000 physicians trained in Western medicine, most people are treated by traditional physicians. In some hospitals, traditional practitioners have been given their own wards and patients can choose between old and new methods of treatment.

- 306 Medical Letter, New Rochelle, New York.** *Notes on drugs and therapeutics in the People's Republic of China.* The Medical Letter (New Rochelle, N.Y.), 14(18), 1 Sep 1972, 65-68. Engl.

For the purpose of studying the use of traditional and Western drugs, therapeutic methods and pharmaceutical manufacturing in mainland

China, the author visited clinics, hospitals, and pharmaceutical plants in cities and communes. Observations indicate an impressive degree of success in the control of malnutrition and infectious diseases. Although the principle of the controlled clinical trial is rarely affirmed, the efficacy of herbal and other remedies have been confirmed in hundreds of years' experience, and cannot be dismissed lightly. Serious study by Western physicians should be made of acupuncture anaesthesia. China appears to be self-sufficient in producing essential modern drugs for treatment and prevention of common diseases, as well as exporting medicines to other countries.

307 Medical World News, New York. *Medicine in China*. Medical World News (New York), 13(2), 14 Jan 1972, 51-62. Engl.

American doctors visiting China in 1971 reported that by politicizing and socializing medicine vast changes in medical practice have been effected: e.g. a vast increase in the number of people receiving medical care, elimination of venereal disease, drug addiction, and alcoholism, reduced incidence of infectious and parasitic disease, halving the length of time spent on medical education, forced integration of modern and traditional physicians, widespread use of many grades of paramedical personnel. The first priority is delivering medical care to all of China's 750 million people. This began in 1949 with a three-level system: 1) municipal clinics in cities and health centres in rural areas, staffed by traditional or modern doctors, nurses, and health aides; 2) district hospitals of 200-300 beds; 3) medical centres and medical colleges. The effect of the Cultural Revolution on health is unclear. Scientific publications ceased and medical organizations were disbanded except for the China Medical Association. However, in the training and distribution of manpower, and the direction of medical research, the Cultural Revolution brought a great thrust to put medical personnel in rural areas, to diminish the distance between health worker and patient, and to bring patients into the decision-making process. China's medical colleges, which were closed during the Cultural Revolution, are now directed by a "revolutionary committee," and admit students on the basis of political commitment, ability, etc. Current (1971) medical education lasts three years, nine months of which is spent in classroom work, the rest being practical experience. Students are expected to return to their own community. New types of paramedical personnel are barefoot doctors (farm workers), worker doctors (factory

workers), and Red Guard doctors (housewives). These people are more than first-aid personnel — after short intensive training they can give preliminary examinations, instruct on family planning, direct sanitation work, etc. Health workers are the lowest category of personnel, without formal training, performing rudimentary tasks. Medical research has been resumed, but is now directed toward diseases that are thought to be important to society. The American observers all reported enthusiastic support for the post-Cultural Revolution system.

308 Mellander, O., *Health services and medical education in China: a brief report*. In Human Rights in Health, Amsterdam, Associated Scientific Publishers, 1974, 153-167. Engl.

The paper is followed by a discussion on pp. 160-167.

Presented at the Symposium on Human Rights in Health, held at the Ciba Foundation, London, 4-6 July, 1973.

The author visited China for the purpose of studying the factors most often found to be limiting in other developing countries, especially health services, medical education, and the availability of food. He emphasizes that no signs of malnutrition in children were evident. Health services in China are compared with those of developing countries under Western influence. Of special note is the role played by barefoot doctors in rural health services. The organization of rural health services is outlined; it is evident that the proportion of nurses on the staff of rural hospitals is very low. Equal formal status is given to traditional and Western medicine. There is extensive use of mobile teams for educational and advisory purposes, and up to one year of rural work every third year is said to be compulsory for all city hospital doctors. Some important differences between the Western (as adopted by developing countries) and the Chinese systems of medical education relate to entrance requirements, curriculum, rural hospital internship, active participation in public health work, and the cost of education to students. The author's conclusions are that availability of food, the absolute priority of prevention in health services and medical education, and the existence of front-line health personnel living with the people together constitute the difference between China and developing nations.

- 309 Meurling, S.,** *Sjukvard och kirurgi i Kina. (Medical care and surgery in China).* Läkartidningen (Stockholm), 64(21), 1967, 2161-2171. Swedish.

Having visited China for two weeks in 1966, the author describes the rural and urban sanitation campaigns that were started after 1949, and the success of massive efforts to combat rats, lice, flies and mosquitoes, smallpox, tuberculosis, polio, plague, cholera, kala-azar, and venereal disease. The country gradually developed a comprehensive hospital and health care network at the commune, county, and city level. China's pharmaceutical, chemical, and instrument industry have developed to the point that China is now virtually self-sufficient as regards medicines and medical equipment. The author describes the advanced equipment he saw displayed at the permanent industrial exhibition in Shanghai. Statistics are given on the training of various medical personnel. Formally trained medical staff regularly go out to the countryside in groups to provide medical services and to give training in medicine and hygiene to the peasants. Examples are given of medical costs to the individual. The author visited a number of hospitals and sanatoria of various types, and describes the conditions in these: staff, equipment, services available, atmosphere, and hygienic conditions. For the larger hospitals, Dr Meurling mentions types of operations performed and compares techniques with those in Sweden. Mortality and infection rates appeared to be low and the operations generally successful. A section is devoted to the success that the Chinese have had with operations to attach severed hands and arms; the procedure is described in some detail. There is also a description of a hospital for traditional medicine that the author visited. Doctors trained in traditional medicine cooperate with modern doctors in the treatment of many illnesses. In the sanatoria, too, treatment consisted of a combination of modern and traditional methods.

- 310 Miura, U.,** (*Preservation of health in Manchuria together with a short history of hygienics: with special reference to the Medical College of Manchuria*). Japanese Journal of Hygiene (Tokyo), 23, Aug 1968, 332-338. Japanese.

The first part of the article reviews the administration of health protection in Manchuria, the medical schools, and the institutions for health research. The article deals with the following topics: prevention of tuberculosis and epidemics such as cholera and scarlet fever, and school and

labour hygiene. The institutions for medical education mentioned are the Medicine Academy of Southern Manchuria, the Medical University of Manchuria, the Medical Education Institute of Manchuria, and the Medical University of Sheng-Ching. The institutions for research in health protection referred to in this article are the South Manchuria Railways Institute for Research in Health Protection, the Laboratory of Health Technology of Manchuria, the Institute for Research in Land Reclamation, and the Institute for Research in Land Reclamation Medicine of the Medical University of Manchuria. The following topics characterize the research conducted at the Medical University of Manchuria: epidemic and regional diseases of Manchuria, ways of living adapted to the climate of Manchuria, food, clothing, and housing conditions of the Chinese living in Manchuria. The second part of the article outlines the field of research in health protection conducted at the Medical University of Manchuria.

- 311 National Academy of Sciences, Institute of Medicine, Washington, D.C.** *Report of the medical delegation to the People's Republic of China, 15 June-6 July, 1973.* Washington, D.C., National Academy of Sciences, 1973. 208p. Engl.

Individual papers have been abstracted separately under entries 118, 165, 228, 312, 366, 522, 523, and 546.

This report on the health services organization, health, medicine, and dentistry in China, presents an American delegation's observations on morbidity, anaesthesiology, pharmaceutical manufacturing, prenatal care and maternal and child health, nurse and midwife training, pediatrics, primary education, population policy, family planning, and psychiatry. The following papers have been abstracted separately: Cherkasky, M., *Health Care Organization and Health Policy Issue*; Wegman, M.E., *Public Health Policy and Practice*; McDermott, W., Stead E.A., *Pattern of Disease*; Ingle J.J., *Report on Dentistry in China*; Lubic R.W., *Observations on Maternity Care*; Lubic R.W., *Observations on Nursing and Midwifery Education*; Lythcott G.I., *Pediatric Health Care in the People's Republic, and Meeting with Vice Premier Li Hsien-nien in Peking*.

- 312 National Academy of Sciences, Institute of Medicine, Washington, D.C.** *Meeting with Vice Premier Li Hsien Nien in Peking.* In Report of the Medical Delegation to the

People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 196-208. Engl.

During a meeting between China's Vice Premier Li Hsien-nien and an American medical delegation, the following topics were discussed: infant mortality rates, observations of medical practices in both China and the U.S., traditional medicine and Western medicine, political ideology in Chinese society, health centres, the family planning programme, and life expectancy.

- 313 Navarro, V.,** *Editorial: health and health services in People's China and Cuba.* International Journal of Health Services (Farmingdale, N.Y.), 2(3), 1972, 327-329. Engl.
Editorial.

In spite of the scarcity of resources, both China and Cuba are providing health care to the majority of the population. Their experience indicates that the lack of health service coverage in most developing countries is due less to a scarcity of resources than to the poor distribution of those resources. In this journal several authors describe the characteristics of efforts in China and Cuba to minimize inequalities between social classes, between urban and rural areas, and between regions. Both countries have relied very heavily on physicians and other medical personnel and most importantly on paramedical and auxiliary personnel. The authors note the value, in both countries, of people as a resource. They do not fail to point out errors of policy, false starts, and retreats in both systems.

- 314 Oksenberg, M.C.,** *Chinese politics and the public health issue.* In Bowers, J.Z., Purcell, E.F., eds., *Medicine and Society in China*, New York, Josiah Macy, Jr. Foundation, 1974, 128-161. Engl.
Discussion by Ezra F. Vogel follows on pp.161-168.

China's top political leaders and leaders of the medical field have produced a much improved public health system. This paper elucidates the political system that has made possible this accomplishment. Chinese politics involves the relations among and the activities within five types of policy-making arenas: 1) the arena under Mao's direct control; 2) those under the direct control of Mao's chief associates; 3) the bureaucratic arenas of the health, education, economic, foreign affairs, public security, and military departments; 4) the "ad hoc" campaign arenas; 5) the community arena. Specific issues involved in

public health and medicine are scattered among all five types of arenas. Issues involving public health are decided in relation to other issues in the arena and are evaluated in terms of their consequences upon the power and value preferences of the policy makers. Each particular arena is examined closely with specific illustrations of policy decision-making in each. The success of China's health policies to date can be attributed to: 1) Mao's personal commitment to the issue, 2) placing of public health issues in the campaign arena, 3) development of a large public health bureaucracy with the appropriate mix of leadership and responsiveness, 4) the existence of several arenas and the capacity of issues to flow from one arena to another, introducing a self-regulatory dimension to the system. Two final questions concerning the future of China's public health system ask: 1) what effect Mao's eventual death will have upon public health issues? and 2) what will be the long-term fate of the campaign arena?

- 315 Orleans, L.A.,** *Health policies and services in China, 1974.* Washington, D.C., U.S. Government Printing Office, 1974. 41p. Engl.

Prepared for the Subcommittee on Health of the Committee on Labour and Public Welfare, United States Senate.

The predominant aspect of mainland China's health policies and services is prevention. In this respect, the mass health movements, attacks on some specific diseases, environment, and occupational health are discussed. Accompanying criticism of the old system of medical training there has been extensive revision of higher medical education. The author outlines the present situation in precollege education and comments on the education of barefoot doctors. Some estimates of medical manpower, until 1966 and following the Cultural Revolution, are provided. The health system is now putting the emphasis on rural areas. The role of the People's Liberation Army, the availability of drugs, the Rural Cooperative Medical Service, are some aspects of the rural health delivery system that are discussed. Some attention is given to urban health services and to the possible implications of China's experience in the health and medical fields for other nations. Seventy-two references are listed at the end of the paper.

- 316 Orleans, L.A., Suttmeier, R.P.,** *Mao ethic and environmental quality.* Science (Washington), 170(3963), 11 Dec 1970, 1173-1176. Engl.

Maoism is an ethic that makes technological development dependent on social development. In combatting poor health conditions prevalent at the time of their takeover in China, the Communists concentrated on preventive medicine and on environmental sanitation measures such as adequate waste disposal and water treatment. Mass campaigns involving mobilization of rural and urban populations effectively cleaned up accumulated litter and contaminated water, eliminated pests, and organized the collection of reusable wastes. Industrial pollution has been fought under several slogans relating to frugality.

- 317 Orleans, L.A.,** *Progress in China.* Science (Washington), 184, 10 May 1974, 695-697. Engl.

Refers to entries 216, 278, 328, 346, and 368.

Orleans discusses six books published in 1972 and 1973 on medicine and public health in China: 1) *Medicine and Public Health in the People's Republic of China.* Joseph R. Quinn, ed., Fogarty International Center, Bethesda, Md., 1973; 2) *Public Health in the People's Republic of China.* Proceedings of a conference, Ann Arbor, Mich., May 1972. Myron E. Wegman, Tsung-Yi Lin, Elizabeth F. Purcell, eds., Josiah Macy, Jr. Foundation, New York, 1973; 3) *Modern China and Traditional Chinese Medicine.* Proceedings of a Symposium, Madison, Wis., April 1972. Guenter B. Risse, ed., Thomas, Springfield, Ill., 1973; 4) *Medicine and Society in China.* Report of a conference, New York, March 1973. John F. Bowers and Elizabeth F. Purcell, eds., Josiah Macy, Jr. Foundation, New York, 1974. 5) *The Amazing Story of Health Care in New China.* K.K. Jain, Rodale, Emmaus, Pa., 1973; 6) *Serve the People.* Observations on Medicine in the People's Republic of China. V.W. Sidel and Ruth Sidel, Josiah Macy, Jr. Foundation, New York, 1973. Although the six books differ in coverage, emphasis, and thoroughness, they all tell of China's dramatic attack on disease and poor health. Topics discussed in each book include preventive medicine, traditional medicine, medical training, and the organization and delivery of health care in both the rural and urban sectors of society.

- 318 Paetzer, I.,** *Gesundheitswesen in der Volksrepublik China: Schwester Mi-lin sammelt heilkräuter.* (Public health services in the People's Republic of China: Sister Mi Lin gathers medicinal herbs). Schwestern Review (Munich), 10, 16-17. German.

An outline is presented of the Public Health Services (PHS) in the People's Republic of China as seen in the course of a visit to China. After the revolution the PHS faced enormous problems due to the shortage of trained medical and nursing personnel. Many factories in the cities have small hospitals, but all have at least a first-aid station staffed with paramedics trained for three months. In the country, these paramedics are called the "barefoot doctors." They do important work in the villages where they look after hygiene, assist in family planning, give inoculations, and perform acupuncture. The paramedics are trained further by physicians and nurses from hospitals. Training of hospital nurses corresponds approximately to that in European university hospitals, but training of both physicians and nurses has been shortened. Surgical hospitals, operation rooms, and surgical equipment are well below European standards. Almost all drugs are prepared from native medicinal herbs. There is one plant manufacturing antibiotics and cortisone in Tientsin; the drugs produced are poor with regard to purity and standardization of potency. Nevertheless, some of these drugs are exported to South East Asia. Treatment of patients is not entirely free, but the amounts charged are very small. On the whole, it appears that the state of health of the population has greatly improved since the revolution, and the epidemics are under control. The history of acupuncture is briefly reviewed.

- 319 Peking Review, Peking.** *Using Chinese medicinal herbs to serve the people better.* Peking Review (Peking), 13(52), 25 Dec 1970, 22-24. Engl.

Examples are used to illustrate China's use of Chinese traditional medicine and medicinal herbs to treat diseases and heal injuries. For instance, the activities of Chang Po-an, medical assistant with an army unit, are quoted, pointing out how Mao Tse-tung's thoughts encouraged him in the use of medicinal herbs to "serve the people." The actions of a herb-collecting group of the Veteran Eighth Route Army are praised.

320 Peking Review, Peking. *Hospital for deaf-mutes serves the people heart and soul.* Peking Review (Peking), 12(14), 4 Apr 1969, 12-14. Engl.

A temporary hospital for deaf-mutes in north-east China, run by a People's Liberation Army unit, reports striking results. Examples of the health workers' total dedication to their comrades in overcoming ill health are quoted.

321 Peking Review, Peking. *Developing China's medical science independently and self-reliantly.* Peking Review (Peking), 13(1), 2 Jan 1970, 24-30. Engl.

In accordance with Chairman Mao's teachings of "maintaining independence" and "improving health conditions," country-wide patriotic health drives, beginning in 1952, have vastly improved conditions in cities and countryside. Several diseases such as cholera, smallpox, and bubonic plague are reported to be wiped out, and the incidence and mortality rates of others, such as schistosomiasis, greatly reduced. Much attention has been paid to developing biological products such as vaccines of various kinds. Examples of China's techniques for treating burns and severed limbs are quoted. The pharmaceutical and medical equipment industry has stepped up production in support of the rural areas. In that Mao attaches great importance to the development of traditional medicine and the integration of traditional and Western medicine, active measures are being taken to implement old and new methods in the treatment of disease and in medical research.

322 Pittman, C.S., *Journey between two homes.* Harvard Medical Alumni Bulletin (Cambridge, Mass.), (48), Nov/Dec 1973, 16-19. Engl.

At the time of China's Liberation, patient care in the Western style was in the hands of a few hundred foreign and Chinese physicians. By the 1970's basic medical care was available in urban neighbourhoods and rural communities alike, since health was made a priority in national planning, next to food and housing. Innovation was the solution to the shortage of medical resources and manpower; the use of lay people and native medicine is the result. The health clinics are staffed by barefoot doctors whereas the commune hospital has more sophisticated facilities and a staff of fully qualified doctors in addition to the barefoot doctors. Under the superstructure of the Ministry of Health there is a strict organization of provincial hospitals, municipal

and district hospitals, down to the health clinics in the urban neighbourhoods, factories, or communes. Each health facility has the privilege of referring its patients for more sophisticated diagnostic testing and treatment. All facets of medicine, Western and traditional, are being reexamined. Pharmacological research of excellent quality is carried out at the Research Institute of Materia Medica. Among the health workers there is no rigid rank or group; a nurse can be trained to be a doctor, and a barefoot doctor can be trained to be either a nurse or a doctor. Individuals are encouraged to work as members of a team.

323 Quijada Cerda, O.A., *Hospitales en China popular. (Hospitals in People's China).* In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 129-148. Span.

See also entry 324.

The hospital is responsible for integral medical attention including prophylactic measures, research, personnel training, etc. Since 1958 hospitals in China have undergone remarkable transformation. The article states the guiding principles that are the basis for the development and day-to-day operation of hospitals. This chapter describes progress made in the graduation of medical students since the Revolution, the staffing and services provided, as well as discussing the Canton, Shanghai, and Peking Hospitals, which are centers for other peripheral hospitals in the communes. The First General Hospital of the First Medical College is also described, as well as the Peking Union Hospital. Some hospitals have a special programme to train auxiliary health workers for posting in rural health centres. These health workers receive training in control of communicable diseases and popular health education. Data on midwifery, sterilization, hospital budgets, and personnel salaries are also discussed.

324 Quijada Cerda, O.A., *Medicina en China. (Medicine in China).* Santiago, Soc. Impresora "Horizonte" Limitada, 1962. 180p. Span.

Individual chapters have been abstracted separately under entries 091, 177, 323, 325, 326, 327, and 449.

This monograph on health and medicine in China concentrates on government policies for the administration and organization of health services, the history of traditional Chinese medicine, the role of the physician, hospital facilities,

the training of medical personnel, and the integration of traditional and Western medicine.

- 325 Quijada Cerda, O.A.,** *Es medicina integral la que se hace en China popular? (Is integrated medicine practiced today in China?)*. In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 171-180. Span.

See also entry 324.

The Chinese hospitals are staffed with competent technical personnel and utilize advanced equipment; doctors in Western medicine work in perfect harmony with traditional practitioners, combining their respective knowledge for the common goal of alleviating human suffering. The author concludes that the concept of integral medicine is the most advanced and complete that can be found for the treatment of the individual and the masses in China.

- 326 Quijada Cerda, O.A.,** *Politica de salud propiamente tal. (Government's health policy)*. In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 43-59. Span.

See also entry 324.

From the beginning of the Communist regime in China, the government assumed responsibility for the health of the population, establishing the principle that in the solution of health problems the population as a whole had to participate. The government established four working principles: 1) To instill in the medical profession a mystical concept of their function and responsibility towards society: to care, cure, mitigate, and prevent the physical suffering of the only capital element available in China — people. 2) To convert into reality the concept of preventive medicine. First- and second-year medical students worked in the fields, third-year students worked in factories. 3) To combine traditional and Western-type medicine. At the time of Liberation there were 20 000 professional doctors, almost all of them concentrated in four urban centers, and 300 000 practitioners of traditional medicine, scattered throughout the country. The latter ranged from the poorly prepared empirical doctor to the doctor-philosopher of great knowledge. 4) To establish that for the health programmes to be effective, general population support was necessary. It undertook to eradicate the four most important plagues in China: flies, mosquitoes, rats, and sparrows.

- 327 Quijada Cerda, O.A.,** *Politica general del gobierno popular. (Policies of the people's government)*. In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 33-41. Span.

See also entry 324.

In the health field, the Chinese government had to tackle problems of immense magnitude and did so in an integrated manner, i.e., the vaccination of hundreds of millions was simultaneously carried out with disinfection of vast land areas. The country underwent three stages, the third of which was the organization of communes starting in 1957. The commune is an economic unit having its own economic infrastructure; it has a central hospital, 16 health centers, 154 meal-dispensing outlets, 112 maternity wards, and 54 child day-care centers, besides the necessary connections with regional hospitals. Six doctors live in the commune, and the prenatal care of 97 percent of women is already practiced. The rest of this chapter describes the economic structure of the commune.

- 328 Quinn, J.R. ed.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Medicine and public health in the People's Republic of China*. Washington, D.C., U.S. Dept. of Health, Education and Welfare, DHEW Publication No. (NIH) 73-67, 1973. 333p. Engl.

Individual papers have been abstracted separately under entries 114, 184, 215, 241, 274, 337, 354, 415 and 450.

This compilation on medicine and health services in the People's Republic of China traces the historical development of health care, examining traditional medicine, surgery, acupuncture, pharmacology, and the role of the family. The provision of health care to rural areas, training of medical personnel, and special health problems such as population growth, nutrition, infectious disease control, and parasitic disease control are discussed.

- 329 Raper, T.,** *China and world health*. China Now (London), 9, Feb 1971, 3-6. Engl.

China, in 1949, had one doctor for every 25 000 people. Today (1971) the ratio is approximately 1:6 000, an increase of 300 percent; if traditional doctors were included, the ratio would be 1:1 000. This situation compares favourably with that in South and South East Asia, most African countries, and Latin America. Expendi-

ture on health in China is much greater than in other developing countries; in fact more is spent on this than on any other social service (excluding education). Unlike South Asian and Latin American countries, China tackled health education and public sanitation on a vast scale. Great progress has been made in eliminating diseases such as cholera, smallpox, schistosomiasis, malaria, and venereal disease. Malnutrition, which has been eradicated in China, still kills 30-40 million people in the Third World every year. Infant mortality (reduced to 3.7 percent in Peking by 1956) is still high in many countries. In China every urban child is born in a hospital or maternity home, and maternal mortality has fallen considerably. The conquest of venereal disease was achieved in a mass campaign in which thousands of paramedical workers were mobilized and trained, propaganda was used intensively, penicillin was manufactured and used extensively, and a sex-education programme initiated. China has shown that venereal disease can be conquered, although it rages out of control in the Western world.

- 330 Rentchnick, P.,** *Starke und schwachen der Chinesischen medizin. (Strengths and weaknesses of Chinese medicine).* Internist (Berlin), 14, Dec 1973, 653-660. German.

This article briefly reviews the major endemic diseases of China, and discusses the eradication of prostitution and venereal disease. Remarkable achievements in family planning are related. In the field of traditional medicine, this article describes how acupuncture is used as an anaesthetic. The conclusion is that the level of Chinese medicine has deteriorated with the reduction in physician education and with the concept of barefoot doctors; however, China will assume a secure position in the medical sciences once it has introduced Western-type medicine with China's own characteristics.

- 331 Rifkin, S.B., Kaplinsky, R.,** *Health strategy and development planning: lessons from the People's Republic of China.* Brighton, University of Sussex, Science Policy Research Unit. 36p. Engl.

Also appears in Journal of Development Studies (London), 9(2), Jan 1973, 213-232.

Three factors affect the provision of health and medical care services to the consumer: the structure of effective demand, the nature of the health programme, and the delivery system. In most underdeveloped countries the distribution of goods and services favours the relatively rich

urban minority, health programmes stress cure rather than prevention, and the delivery system favours highly skilled doctors as opposed to medical auxiliaries. The Chinese health system differs in that resources are allocated to provide a more preventive programme to a larger part of the population, combined with a high level of political consciousness. Medical auxiliaries have partly substituted for highly skilled doctors and traditional medicine complements Western medicine. The growth and distribution of health and medical care services as they follow the various stages of economic development are reviewed, noting such developments as mobile medical teams, rural health centres, training of medical auxiliaries, the transfer of one-third of urban doctors to rural areas, and reliance on the People's Liberation Army for rural health work. Mass campaigns have been relied upon for the eradication of all communicable diseases and pests, and for changing the ways of village life. The delivery that supports the preventive programme focusses on providing health care through 1) labour-intensive construction techniques (relying on mass campaigns), 2) training and use of medical auxiliaries, 3) incorporation of traditional medical practitioners into the health system. The author's evaluation of the Chinese health system according to the cost-benefit framework of analysis is that this system has a lower resource cost than a more capital-intensive, curative, urban-based system, for a number of reasons. Some factors that have favoured this system in China, but may prevent its transfer to another country, are the following: this system is operable only in a labour-surplus economy, it depends largely on the ability to mobilize labour at low opportunity cost, it relies on a well-documented and tested traditional medicine that has facilitated the integration of old and new, etc.

- 332 Rifkin, S.B.,** *Public health: health services in China.* China Notes (New York), 9(4), Autumn 1971, 41-43. Engl.

China is overcoming the health problems faced by a developing nation by rejecting high Western standards in favour of meeting local needs. This system relies on extensive use of traditional practitioners, health teams, and medical auxiliaries in an effort to provide health care for China's rural population (80 percent of its total population). Health policies are an integral part of overall development planning. Standards set by Mao Tse-tung demand that: medical care must serve the workers, peasants, and soldiers; prevention

receives priority; Western and traditional medicine are united; and medical campaigns are coordinated with mass movements. During the period of 1950-1952 mobilization of trained medical personnel began with discouraging private practice, and urging Western doctors to join traditional physicians in state clinics. Medical schools expanded simultaneously. Health teams were established, primarily to staff anti-epidemic stations, establish maternal and child care services, train local preventive health workers, etc. Next came mass mobilization campaigns, initially to improve village water sanitation, and to eradicate pests. With an emphasis on heavy industry from 1953 to 1957 health policies were focussed on programmes to benefit urban workers, but once the emphasis was placed again on agriculture (by 1956), health policy was directly linked with its development. By 1958 communes had emerged as cornerstones of the economic infrastructure. Rural health centres were responsible for outpatient and regional health work, direction of mass campaigns, control of contagious diseases, public health inspection, and preventive work. As a first step toward staffing these rural facilities, traditional physicians were widely accepted, schools of traditional medicine established, and Western-trained doctors urged to study Chinese medicine. Secondly, on a system of rotation city medical personnel served on health teams in rural areas, expanding the ranks of rural medical services. A third step was the creation of the "barefoot doctor," trained to carry out basic treatment and preventive and sanitation work. Medical personnel were organized to cover large areas as mobile medical teams; one major task of the team is educating the barefoot doctors. A cooperative medical system at the commune level has reduced the costs of treatment and medicine for commune members. It is noted that the People's Liberation Army has become the model for emulation for all medical and health work.

- 333 Rifkin, S.B., *Public health: China and the less developed nations*. Contact (Geneva), (12), Dec 1972, 2-13. Engl. Fren.**

General features of health policy distinguish China's approach from those of other less developed nations. 1) China has provided a more equal distribution of health resources among its population; 2) indigenous resources have been utilized, avoiding massive imports of equipment, drugs, and medical technology; 3) investment in medical technologies has been through emphasis on developing both the Western and medical

sectors. These policies have been pursued in a number of ways: 1) prevention has been stressed, but combined with prophylaxis and treatment, leading to a rapid decrease in disease morbidity and the creation of a solid health infrastructure; 2) the Chinese have effectively used methods of mass mobilization to support preventive activities; 3) in developing health and medical care services, the Chinese have put stress on the rural areas; 4) programmes for manpower training and deployment have been developed that are responsive to the available resources and to the stated goals of the new society; 5) emphasis is being placed on the integration of traditional and Western medical practice. In considering the applicability of China's experience to the other developing nations it is pointed out that 1) the Chinese experience with integrating health and economic plans suggests that other nations may profit by looking carefully at the relationship of these two areas in constructing their own health systems; 2) alternative ways must be sought for allocating scarce resources for a) urban and/or rural services and facilities, b) preventive and/or curative services, c) training of highly qualified physicians and/or medical auxiliaries; 3) ways must be found for making the present national health and medical care systems more adaptable to existing diffuse problems that confront government policy makers.

- 334 Rifkin, S.B., *Public health in China: is the experience relevant to other less developed nations?* Social Science and Medicine (Oxford), 7, 1973, 249-257. Engl.**

China's health policy is distinguished from other developing countries in the following ways: 1) it has provided a more equal distribution of health resources, 2) it has utilized indigenous resources without dependence on equipment, drugs, and technology of other nations, 3) investment in medical technologies has followed the "walking on two legs" policy and has been considered in terms of social goals in relation to the level of economic growth. In pursuing these policies the Chinese have 1) stressed prevention but combined it with prophylaxis and treatment, 2) used methods of mass mobilization to effectively support preventive measures, 3) put stress on the rural areas, 4) developed programmes for manpower training that are in keeping with resources and social goals, and 5) emphasized the integration of traditional and Western medicine. Lessons from the Chinese experience that are relevant to other nations revolve around these questions: 1) how are health planning and economic

development related? 2) what are the alternative ways of allocating scarce resources? 3) in what ways can present national health and medical care systems be made more adaptable to existing problems confronting government policy-makers? In asking these questions China has rejected the framework of Western practice in favour of programmes created for community health needs.

- 335 **Robb, D.,** *Medicine in China.* New Zealand Medical Journal (Wellington), 66(415), Mar 1967, 183-187. Engl.

Medical education in the People's Republic of China was altered during the Cultural Revolution in the following ways: the years of education were reduced, the amount of practical work increased, and students were required to spend time working in industry, agriculture, etc. A visiting New Zealand physician observes that traditional medicine, including the practice of acupuncture and moxibustion, is widespread. All physicians see things in the light of their Revolution, and in terms of the needs of the peasants; furthermore, one-third of the staff of city hospitals are on circuit in rural areas. Hospital standards appeared to vary considerably, and equipment facilities and furniture were adequate. Some aspects of the Chinese Medical Association's functions are discussed.

- 336 **Rosen, S., Rosen, H.,** *China through Rosen-coloured glasses.* Eastern Horizon (Hong Kong), 12(1), 1973, 55-58. Engl.

Returning visitors report that the Chinese are working to eliminate schistosomiasis, and in most parts of China it no longer exists. Infant mortality has been reduced by more than 90 percent since the women barefoot doctors are trained also as midwives. Difficult deliveries are performed in hospital. Birth control is taught to men and women by the barefoot doctors or by trained housewives. Hospital facilities at the commune level, health stations at the brigade level, and the barefoot doctors comprise a network of medical care extending from the field to the specialized hospital. In the city hospitals there is close association with small health stations in the lanes. Both types of medicine, traditional and Western, are available to patients.

- 337 **Salaff, J.W.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Role of the family in health care.* In Quinn, J.R., ed., *Medicine and Public Health in the People's*

Republic of China, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No (NIH) 73-67, 1973, 23-51. Engl.

An examination of the functions of the Chinese family in the community, and the strength of family culture sheds light on the social context of illness and medical care. This discussion on the role of the family is organized into five sections: 1) sources of data on family life and population processes (press reports, visitors' reports, population surveys and medical research journals, interviews with former mainland citizens); 2) the family and the community and functions of the family (economic and political-legal functions, child care); 3) status of youth and women; 4) the family as repository of culture; and 5) patient-practitioner relations and the role of the family. It is concluded that extrafamilial organizations have not been sufficient to replace family economic, political, educational, and welfare functions, but the family has been brought into closer relationship with the community than before Liberation. The important role of the family in the community and in the lives of its members indicates that family behaviour figures in the etiology of disease and in health care. References are listed at the end of the paper.

- 338 **Salaff, J.W.,** *Mortality decline in the People's Republic of China and the United States.* Population Studies (London), 27(3), Nov 1973, 551-576. Engl.

This paper assesses medical evidence that indicates that the rate of mortality decline in China since 1949 has been very rapid, primarily due to the unique social organization of Chinese public health practices. Past and present mortality trends in China and the United States are compared, with a look at changes in age structure and rural-urban mortality differentials. Emphasis is placed on the nationally promoted organization for public health and disease prevention that facilitated the adoption of Western medicine.

- 339 **Sheng, W.,** *Medical and health work.* In Douglas-White, I., McLachlan, G., eds., *Health Service Prospects: an International Survey,* London, Lancet, 1973, 256-263. Engl.

Since the founding of the People's Republic of China, medical and health work has adhered to Mao's principles of serving the workers, peasants, and soldiers, putting prevention first, uniting traditional practitioners and Western-type

physicians, and linking health work with mass movements. Mass prevention and treatment are carried out on a large scale. Diseases such as smallpox and cholera have been eradicated, and advances have been made in the fight against schistosomiasis. Institutions of medical education have increased in number and 26 times as many medical students have been graduated since 1949 as in the 20 previous years. Since the Cultural Revolution, urban medical personnel have gone to factories, mines, villages and border areas to serve the people. A contingent of barefoot doctors provides medical aid in the rural areas. Cooperative medical service in the communes provides medical care for a nominal annual fee. Medical advances in acupuncture anaesthesia, treatment of burns, fractures, and severed limbs are noted.

- 340 Sidel, R.,** *Role of the community and the patient in health care.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 124-134. Engl.
Also appears in Sidel, V.W. and Sidel, R., *Serve the People*, New York, Josiah Macy, Jr. Foundation, 1973, 99-110. See entry 346.
Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

According to Mao Tse-tung thought, the way to teach principles of health prevention and health care is to involve people in them. Thus the masses have been activated in such campaigns as the Patriotic Health Movement, which has been expanded to include the sanitary aspects of food, water, and the environment. Health propaganda plays an important role in community participation in health problems. The classic example of the use of mass mobilization in health has been the campaign against schistosomiasis. Indigenous health personnel (barefoot doctor, Red Guard doctor, worker doctor, and health worker) perform minor health functions and communicate what they have learned to their friends and neighbours. Patients are expected to struggle against their own disease, and to participate in their own care. China is a country of mass and individual participation, of mass and individual responsibility.

- 341 Sidel, R., Sidel, V.W.,** *The human services in China.* Social Policy (New York), 2, Mar-Apr 1972, 25-34. Engl.

Visiting China in 1971 vastly changed the authors' preconceptions of that country and its people. Reverence for Mao Tse-tung and his thought pervades the society. China's human services system stresses participation, mutual involvement, breaking down of exclusiveness, closing the rural-urban gap and the labourer-intellectual gap. For instance, the powerful community mental health design involves seven essential components: 1) collective help, 2) self-reliance, 3) physical therapy, 4) discussion, 5) community ethos, 6) follow-up care, and 7) the teachings of Mao. Chao Yang, a workers' community in Shanghai, is discussed as an example of local urban government, its governing body being the Revolutionary Committee. It is subdivided into lanes and in turn into groups, with each group leader responsible for organizing social services in the area. Similarly every local subdivision is organized for health care. The lane health station is responsible for treatment of minor illnesses, for health education, birth control, and immunization. China's advances in the health field are indicated in the increased number of people receiving health care, the eradication of venereal disease, changes in physician education and auxiliary health workers, and the coordination of modern with traditional medicine. With the Cultural Revolution, such new programs as movement of medical personnel to the countryside as mobile teams, training of rural health workers (barefoot doctors), revision of medical education, have been given impetus. The early care and training of children has been transformed into a system not only to impart knowledge, but also to implant philosophical and cultural values. Preschool institutions, in addition to freeing mothers for work, provide infants with an early experience of collective living. The authors conclude that the Chinese have achieved "an admirable compatibility between stated political goals and ideals and human service practice."

- 342 Sidel, R.,** *Social services in China.* Social Work: Journal of the National Association of Social Workers, (New York), 17(6), Nov 1972, 5-13. Engl.

Before examining China's social services, it must be noted that China is a rural country; all services are decentralized; the Cultural Revolution has been profoundly influential; and Chinese life is structured on Mao's principles of self-reliance, mutual help, and learning by doing. A worker's village, Chao Yang, in Shanghai, illustrates local urban government. The community is

largely self-sufficient, and subdivided into eight lanes, each with a health clinic, department store, and food markets. A 21-member revolutionary committee is the governing body of the village; each lane in turn has a revolutionary committee. Groups (of people living in one building) elect a leader responsible for social services, mediating quarrels, providing health care, etc. Neighbours are actively involved in helping each other. The place of work is intimately concerned with an individual's personal welfare; for instance, admission to a mental hospital is a cooperative effort of patient, family, job foreman, and psychiatrist. Physicians' and nurses' roles encompass the social functioning of the patient as well as his physical health. The emphasis has been on bringing medical professionals closer to their patients; and on putting resources into rural medical care. Barefoot doctors (peasants who have been trained for approximately three to six months), Red Guard doctors (urban counterparts of the barefoot doctors), worker-doctors (part-time medical workers in factories), and health workers (trained by and responsible to barefoot doctor or Red Guard doctor) incorporate social service functions into their medical work. Immunization and birth control are given as examples. Individuals have a role to play by participating "whole-heartedly" in curing their illnesses. Four primary features of the Chinese experience that have relevance for the United States are: deprofessionalization, mass participation, mutual help, and self-help. The diffusion of social services into all aspects of Chinese society may prove instructive.

- 343 Sidel, V.W.,** *Some observations on the health services in the People's Republic of China.* International Journal of Health Services (Farmingdale, N.Y.), 2(3), 1972, 385-395. Engl.

The observations on health services presented in this paper were made by the author during a one-month visit to the People's Republic of China in September-October 1971 as the guest of the Chinese Medical Association. The first part of the paper describes the following general principles on which current health services in China appear to be based: emphasis on care in the rural areas; integration of traditional Chinese medicine with Western medicine; expanded use of community members in health services; decentralization; education and status changes for health workers; and an ethic of service and cooperation rather than professional satisfaction

and competition. The second part describes current practices in the organization of health services, in hospitals, and in maternal and child care. The overall conclusion is that the Chinese have made incredible progress over the past 22 years and have many lessons for other countries. (Journal abstract.)

- 344 Sidel, V.W.,** *Serve the people: medical care in the People's Republic of China.* Asia (New York), 26, Summer 1972, 3-30. Engl.

This transcript of a lecture/slide-show of the author's September 1971 visit to the People's Republic of China, focusses on social medicine and community health. Lane health stations, run by Red Guard doctors (a housewife of the neighbourhood given ten days training), provide family planning information and health education, perform immunizations, etc. Birth rates in cities such as Shanghai and Peking have been dramatically reduced, although results in the communes are not as noticeable. Western-trained physicians consult with traditional physicians on patient care. Observation of successful use of acupuncture in treating painful conditions and for anaesthesia in conjunction with modern medicine are reported. Children are attended as infants in nursery kindergartens provided by every major institution in China. A commune health station was observed to be immaculate and functional, though sparsely equipped. The Chinese are attempting to build a whole system of human service on the idea of cooperation rather than competition.

- 345 Sidel, V.W.,** *Health services in the People's Republic of China.* In Bowers, J.Z., and Purcell, E.F., eds., *Medicine and Society in China*, New York, Josiah Macy, Jr. Foundation, 1974, 103-127. Engl.

Also appears in Sidel, V.W., Sidel, R., *Serve the People*, New York, Josiah Macy, Jr. Foundation, 1973, 17-39. See entry 346.

China's medicine is discussed according to three distinct periods: pre-Liberation; from Liberation to Cultural Revolution; and post-Cultural Revolution. Pre-Liberation China suffered almost every form of nutritional and infectious disease, high morbidity rates, poverty, and gross inadequacy and unavailability of health workers and medical facilities. Following Mao's assumption of state power, at a National Health Congress in Peking in the early 1950's, the following precepts for health services were set forth: 1) medicine must serve the working people (workers, peasants, and soldiers); 2) preventive medicine

must be given priority over curative medicine; 3) practitioners of Chinese traditional medicine must be united with Western-type physicians; 4) health work must be integrated with mass movements. Implementation of these principles was to a certain extent influenced by the Soviet Union. The near eradication of nutritional, epidemic, and social diseases by the 1960's, the destruction of pests in mass campaigns, and the training of health personnel took place rapidly, putting China on its way to a well-developed health care system by the mid-1960's. Recognizing shortcomings such as uneven rural-urban distribution of health resources, and continued emphasis on curative medicine, the Cultural Revolution placed a new emphasis on medical work in rural areas. Mao directed that medical education be reduced to three years, that more research be directed toward commonly occurring illnesses, and that all doctors practice for a time in the countryside. Observations of health services from 1971 and 1972 show: decentralization and local "self-reliance," the presence of central policy direction, reopening of more medical schools, research emphasis on techniques of traditional Chinese medicine and treatment of common illnesses, continuing emphasis on health services in the rural areas (with physician rotation, mobile medical teams), integration of traditional medicine with Western medicine, etc. Preliminary statistical evidence indicates the success of the health programme. Implications for other countries are considered.

- 346 Sidel, V.W., Sidel, R., *Serve the people: observations on medicine in the People's Republic of China*. New York, Josiah Macy, Jr. Foundation, 1973. 317p. Engl.**
Individual chapters have been abstracted separately under entries 095, 186, 345, 454, 490 and 491.

The Sidels' book is a comprehensive study based on two visits to China in 1971 and 1972 respectively, for the purpose of observing health care. Topics discussed include the development of health services, health care in cities and in the countryside, the role of the community and the patient in health care, medical education, integration of traditional and modern medicine, treatment of mental illness, health administration, and research. An extensive summary and appendices, statistical data, and photographs are included.

- 347 Sidel, V.W., *Health care behind the bamboo curtain*. Hospital World (London), 1(10), Feb 1972, 10,15,17. Engl.**

According to recent observations by V.W. Sidel, hospitals in the People's Republic of China, like all major institutions, are run by Revolutionary Committees. Hospitals appeared similar to those of North America, with the exception that there is greater cooperation among the professional staff. In health care delivery the emphasis is on common illnesses and the combined use of traditional and modern medicine. There are very high rates of immunization, mostly administered by health workers such as the barefoot doctor or the Red Guard doctor. Health bills for workers in certain industries, government workers, and people in the communes are paid by the institution in which they work. All other individuals pay full price for medical care but that price is remarkably low. Since 1965 the norm for physician education has been three years of medical school training. Students work after leaving high school and rely on fellow workers for recommendations to the university. During the three years of training a year or so is spent in the practice of medicine in the countryside; there is great emphasis on the practical side of training. In the field of birth control, a wide variety of contraceptive methods are used, with the result that in Shanghai, for instance, the birth rate has fallen to six per 1 000. In the countryside the birth rate is still quite high. A wide range of traditional methods of healing, including moxibustion and acupuncture, are used. Sidel believes we have a great deal to learn from the Chinese in health services organization, medical training, and responsiveness to people's needs.

- 348 Sidel, V.W., *Chinese humanity vs. U.S. technology*. New England Journal of Medicine (Boston), 289(9), 30 Aug 1973, 487-488. Engl.**

Letter to the editor, referring to article by Malt and McDowell. See entry 477.

Commenting on an article by Ronald Malt and Frank McDowell, entitled *Cable from Cathay*, Sidel notes that the Chinese experience in reimplantation surgery and burn treatment is devoted as much to motivating patients and health workers as to developing technical virtuosity. Sidel believes that most Chinese health workers understand the totality of medical care and do not in their own work stress technology at the expense of human problems.

- 349 Sidel, V.W.,** *Primary care in the People's Republic of China.* Bronx, N.Y., Montefiore Hospital and Medical Centre, 1972. 6p. Engl.

Unpublished document.

Paper presented to the Milbank Memorial Fund Conference, Mexico City, Feb. 16, 1972.

In this paper Sidel discusses primary medical care in China according to these generalizations: 1) great attention has recently been given to the provision of primary care in rural areas, 2) emphasis has been placed on the combination of Western medicine with traditional Chinese medicine, 3) primary care depends on participation of the patient, para-professionals, and community members, 4) prevention is closely tied to primary care, 5) new forms of health manpower have been developed, 6) primary care is decentralized to the places where people work and live, 7) in the urban areas there are alternative sources of primary care, 8) methods of payment vary widely, 9) all professional personnel are salaried, all para-professionals are unpaid, 10) roles are assigned on the basis of skills rather than on the basis of experience or credentials, 11) education of personnel is ongoing, 12) status differences between primary health care workers and specialists have been minimized.

- 350 Sidel, V.W.,** *Medicine in the People's Republic of China.* In Proceedings of the First Annual Meeting of the Institute of Medicine, National Academy of Sciences, Washington, D.C., Nov 1971, 1-4, 46-64. Engl.

Discussion of medicine in Mainland China covers the following topics: changes in medical care since Liberation, developments since the Cultural Revolution, institutions of special interest, street and lane health station, the combination of traditional medicine with modern medicine, the shift of resources to the rural areas and medical education.

- 351 Sidel, V.W., Sidel, R.,** *Delivery of medical care in China.* Scientific American (New York), 230(4), Apr 1974, 19-27. Engl.

Beginning in 1949 China's new government confronted a deficiency of health resources by initiating a dual programme. This involved "mass movements" aimed at improving public health and sanitation, and the training of large numbers of new health workers. At a commune outside Shanghai, the authors visited a brigade health station that was staffed by four barefoot doctors

and a midwife. The barefoot doctors generally receive three to six months initial training, followed by on-the-job education. These health workers are responsible for treating minor illness, administering immunizations, supervising night-soil treatment, and carrying on the campaign against pests. Their time is divided between farmwork and the health station. Delivery of medical care appeared to be similar in other rural areas. In urban areas there is the same pattern of decentralization. In a neighbourhood are several lane health clinics, staffed by local housewives called Red Medical Workers. The lane health clinic is visited weekly by a physician from the neighbourhood clinic. Much of the emphasis at the health station is on preventive medicine, and especially immunization against infectious diseases. Both rural and urban health workers have as one of their prime responsibilities a programme to make contraception popular. Some urban areas have reported remarkably low birth rates of around eight per 1 000. Statistics for rural areas are substantially different, although they are still lower than the former national rate of 45 per 1 000. Emphasis on unifying traditional Chinese medicine and Western medicine has increased since the Cultural Revolution, with the result that acupuncture and herbal medicine have become treatment methods used by both types of physician.

- 352 Stanley, M.,** *Two experiences of an American public health nurse in China a quarter of a century apart.* American Journal of Public Health (New York), 63(2), Feb 1973, 111-116. Engl.

An American nurse notices many dramatic changes in China, between 1948 and 1972: the absence of pests and prostitution, the use of hygienic toilets and treatment of night soil, the availability of and promotion of family planning services, and the emphasis on preventive health. Changes in medical education have included a reduction in the length of training, integration of Western and traditional Chinese medicine, more practical experience, training of barefoot doctors, and revised admission requirements to medical schools. Routine immunization of children from time of birth and use of acupuncture in hospital surgery are discussed.

- 353 Stanley, M.,** *China: then and now.* American Journal of Nursing (New York), 72(12), Dec 1972, 2213-2218. Engl.

An American nurse, recording a visit to China in 1972, notes evidence of good health everywhere. Surgical procedures as observed in a hospital in Weehan, performed under excellent conditions and using acupuncture anaesthesia, are contrasted with conditions 25 years before. Family planning services are available to men and women at the time of marriage, physical examinations are done before marriage and during pregnancy, and children are regularly immunized. The entire health care system is directed toward serving the people; prevention is the most important work. Whereas few of China's millions could pay for medical care before 1948, the health care system now reaches out into all levels of life. Chinese industry now provides materials for immunizations, medicines for treatment, instruments for surgery, and birth control supplies. Local people, who study three or four months each year at their own hospital or health centre, become barefoot doctors, sanitarians, and apprentices to doctors, nurses, midwives, acupuncturists, and dentists. There are many levels of health workers with movement from one category to another being fairly easy. Apparently there are more Western-style physicians being educated in traditional forms of medicine. Western-style nursing, as well as medical practice is now open to peasants, farmers, workers, and soldiers, according to ability and the recommendations of the committee under which the student has worked.

- 354 Suttmeier, R.P.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Academy of medical sciences*. In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education, Welfare, DHEW Publication No. (NIH) 73-67, 1973, 173-190. Engl.

At the core of China's research doctrine are four elements: 1) research must "serve production"; 2) there has been an emphasis on indigenous capabilities; 3) it has been marked by periods of intense anti-professionalism; 4) science and technology are to be integral parts of the new China. With these four statements as a basis of discussion, the author looks closely at the organization and policy of medical research, research on traditional Chinese medicine, modern medical science, and research in the post-Cultural Revolution period.

- 355 Thomas, A.L.,** *Socio-politico-cultural aspects, PRC*. Journal of the National Medical Association (New York), 65(1), Jan 1973, 27-28. Engl.

Definition of an appropriate system of health care in China came after the Cultural Revolution of 1966, when it was decided to: 1) reinstate traditional medicine, and 2) send health workers to factories and to rural areas for "reeducation" by the people. Health care is based on the individual's right to high standards of health care. Results have been remarkably effective, as there is a strong central force able to allocate resources on a priority basis. Medical attention is shifting from venereal disease, drug addiction, etc. to chronic diseases, and it is anticipated that the life span will continue to rise.

- 356 Time, Toronto.** *Prescriptions of Chairman Mao*. Time, Canadian Edition (Toronto), 10 Jun 1972, 48-49. Engl.

Several American physicians and scientists visited China in 1971, returning with the following appraisal of the Chinese health care system. Clinical treatment and preventive measures monopolize Chinese medicine. Far more doctors are being trained now that the curriculum has been shortened to three years. Barefoot doctors in rural areas and Red Guard doctors in the cities are peasants, housewives and factory workers who divide their time between their regular jobs and medical duties. Barefoot doctors are promoters of birth control and immunization against contagious diseases at the grassroots level. Mao's policy, which has emphasized cleanliness and repeated campaigns against venereal disease, schistosomiasis, typhoid, malaria, etc., has proved successful. Health care delivery is organized in a pyramid system, with local health stations, district hospitals, and major urban medical centres. Costs to patients are generally low. Patient care frequently combines traditional and modern methods. As more adults survive to adulthood, cancer and heart disease become major problems.

- 357 Tolbert, G.,** *Community health and consumer participation in the health care delivery system, PRC*. Journal of the National Medical Association (New York), 65(1), Jan 1973, 21-23. Engl.

Health care in China differs from that of the United States in that it reaches a great number, if not all of the population. The value of the individual is illustrated by the enactment of a large

number of public health laws, extension of public health service to the masses (especially the poor, minority groups, isolated populations), the application of diverse resources to public health work, progress in severed limb reimplantation, and the coverage of all individuals by medical services either through salary deductions or government support. In the community, government efforts eliminated syphilis, and are now (1973) focussing on prevention of parasitic diseases. The community participates by selecting physician candidates and other medical workers. Thus the community has a great deal of control over the profession. The People's Republic of China has reached a high level of community responsibility and consumer participation.

- 358 Tsuchitani, P.,** Committee on Scholarly Communication with the People's Republic of China, National Academy of Sciences, Washington, D.C. *Public health in China*. Washington, D.C., National Academy of Sciences, Jun 1972. 9p. Engl. Unpublished document.

China's successful public health programme has relied on utilization of manpower from among the masses. Maximizing outreach and minimizing cost meant reliance on mass campaigns (against venereal disease, schistosomiasis, pests, etc.), training medical auxiliaries (such as barefoot doctors), and integrating traditional medical practitioners in the health service. Recent (ca. 1972) programmes in medical care and education have been given their impetus by the Cultural Revolution, and Mao's dictum to: 1) transfer large numbers of medical personnel to the countryside; 2) change the curriculum and duration of medical education; 3) renew emphasis on Chinese traditional medicine. During the Cultural Revolution, medical schools were closed and most students sent to the countryside in mobile medical teams. In 1970 the medical schools reopened with a new administrative body called the "revolutionary committee." Medical education has been reduced in duration from six to three years, about one-quarter of that time being spent in practical training outside the classroom. Candidates must have a strong political commitment and the recommendation of fellow workers, peasants, or soldiers. At all levels of care, medicine and pharmacy as modern disciplines are being used at the same time as Chinese traditional medicine. Medical personnel have become stratified into three general categories: 1) professionals (including graduates of three

year medical schools, specialists, assistant doctors, nurses, pharmacists, midwives, all of whom travel to the countryside in mobile medical teams, 2) paraprofessionals, including barefoot doctors (given three to six months' training by mobile medical team), worker doctors (urban counterparts of barefoot doctors), and 3) non-professionals including the "Red Guard doctor" whose work takes place in the urban neighbourhood, and "health workers" trained in rural areas for simple sanitation measures by the barefoot doctors. In a separate category are the People's Liberation Army medical teams, which played a prominent role in the development of China's health services by training barefoot doctors, helping communes establish their cooperative medical service, etc.

- 359 Unger, J.,** *Snails and pills*. Far Eastern Economic Review (Hong Kong), 2 Oct 1971, 24-26. Engl.

China's government has given over a large portion of local decision-making responsibilities to the peasantry. There has been an increase of locally managed rural medical and educational programmes, reinforced by influxes of trained personnel. Between 1966 and 1971 some 330 000 urban medical workers are reported to have been moved to the countryside; an additional 400 000 doctors and nurses had been recruited into mobile teams to tour the villages. In addition to their regular duties, doctors have been training barefoot doctors in three-month courses. In urban areas "worker doctors," selected for training by their factories, receive eight-month part-time courses in first aid, acupuncture, and common disease symptoms. Rural medical care is supported by the medical cooperatives. Colleges and universities reopened in 1971, with increased enrollment from members of the peasant class and a new programme of political education.

- 360 Veeder, B.S. ed.,** *Medicine in Red China*. The Journal of Pediatrics (St. Louis), 51, Jul-Dec 1957, 360-362. Engl. Editorial.

A report from the China Medical Association indicated that Chinese physicians trained in modern medicine found it difficult to work with and learn from the traditional physicians. A second conflict for the modern physician seemed to arise between his scientific integrity and the acceptance of Pavlovian medical philosophy, the supreme authority in Soviet medicine.

- 361 Vogel, E.F.,** *Organization of health services: People's Republic of China.* In Wegman, M.E., ed., *Public Health in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 51-61. Engl.

China is unique among developing, nonindustrialized nations, in having a solid organizational base that combines specific programmes into an effective overall effort. With the Communist takeover in 1949, at each level of government a public health department was established, through which the new public health programme was organized. In reorganizing higher education, the medical departments of all the universities in a given metropolitan area were combined into one or two major medical schools. Many new institutions for doctors, ancillary professions, and paramedical personnel were created at all levels of government. A socialist transformation of medical practice took place, and the state acquired control over pharmaceutical manufacturing and distribution. Traditional medicine was "modernized" by collecting all traditional remedies and subjecting them to scientific test. Acupuncture underwent a revival when it was found to relieve pain and act as an excellent anaesthesia for surgery. The organization of Chinese medicine became distinctly Western; the total assimilation of these two medical systems may be in the near future. Extension of public health services to remote areas included mass campaigns for eradication of pests, for immunization, etc. As of the late 1960's there was still inadequate distribution of quality medical personnel in remote areas and in response to this need greater numbers of "barefoot doctors" have been trained. Transportation in the more remote areas is an obstacle to providing quality medical care, and basic diagnostic machinery and various expensive drugs are still in limited supply.

- 362 Walden, E.C.,** National Medical Association, New York. *Observations on acupuncture and reimplantation surgery in the People's Republic of China.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 14-16. Engl.

One Western doctor, during a visit to China in 1972, observed acupuncture anaesthesia at the Chou Yang Hospital in Peking. Since 1965 more than 2 000 cases have been treated under acupuncture anaesthesia. Striking examples of reimplantation surgery were observed and photographed; all showed regrowth, with varying degrees of function.

- 363 Wallace, J.D.,** *Health system of largest communist country less socialized than ours in many ways.* Canadian Medical Association Journal (Toronto), 109, 1 Sep 1973, 409. Engl.

The most impressive aspect of China's health service system observed by this Canadian doctor was its high degree of decentralization. Basic standards are set by the federal and provincial health bureaus, but individual communes are expected to be as self-sufficient as possible. Personal premiums are paid by commune members, and some financing is paid from the commune's central funds. Health cooperative funds pay for operating costs of the local health system as well as specialized care individuals may need in city hospitals, and education of professional and nonprofessional medical students selected at the commune level. Staff of the national and provincial health departments are noticeably fewer than in similar Canadian organizations. Its successful operation indicates decentralization in health services is the right policy.

- 364 Wang, Chao-lin.,** *Medicine town revived.* Peking Review (Peking), (7), 15 Feb 1963, 17-18. Engl.

South China's main trading centre for medicinal herbs was for many centuries the town of Changshuchen. Its revival and prosperous growth today is an illustration of the renaissance of traditional Chinese medicine under socialism.

- 365 Wang, R.,** *Forty days in China.* New York, Russell Sage College, 1973. 10p. Engl. Unpublished document.

Visiting China in 1973, a China-born nurse observed hospitals, operations performed using acupuncture anaesthesia, herbal medicine, and medical research work. Hospitals appeared to be clean, well ventilated, and basically equipped, and offered training programmes for nurses as well as for physicians and allied health workers. Nurses are trained in both Western and Chinese medicine. Operations of various types (cesarean section, appendectomy) using acupuncture anaesthesia, and also severed limb reimplantation procedures were observed. Medical coverage in China is paid for according to an individual's occupation and location. Medical teams from city hospitals go to the communes in the rural areas for six to twelve months every three to five years. In the countryside or in the factory the medical team conducts training programmes for local health workers (barefoot doctors in particular). Each commune has its own health bureau,

responsible for planning the health care of the commune. Medical workers (physicians, nurses, barefoot doctors) have increased greatly in numbers since the Cultural Revolution. Medical school curriculum has been reduced from six to three years after high school, and includes basic medical sciences, clinical teaching, and clinical practice; eight weeks of each year are spent working and living in rural areas. The nursing education, given by hospitals, lasts two years after junior high school. A nurse may enter medical school if she satisfies certain criteria and is recommended by the hospital administration and her peer group. Barefoot doctors are locally trained, usually for six months in a commune hospital. Midwives (trained for three years after high school) handle all normal deliveries.

- 366 Wegman, M.E.**, National Academy of Sciences, Institute of Medicine, Washington, D.C. *Public health policy and practice*. In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 40-49. Engl.

Visits to Chinese hospitals, medical schools, factories, and communes in 1973 impressed upon the author the importance of motivation and of the post-Cultural Revolution interaction between professionals and the masses. There is constant emphasis on Chairman Mao's dictums that public health should emphasize prevention and stress the rural areas, that Western and Chinese medicine should be combined, and so on, with evidence that these principles are being adhered to. Nationwide demographic data relating to health are still scarce but it is estimated that infant mortality in Shanghai is extraordinarily low-8.7 per 1 000 live births. Data from other hospitals also indicates an enormous improvement in child health indices. The general policy that professionals and educators must have continuing and meaningful contact with the labourers makes their work more meaningful than in former times.

- 367 Wegman, M.E.**, *Addendum: some firsthand observations, June 15 - July 6, 1973*. In Wegman, M.E., Lin, T., Purcell, R.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 273-282. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese

Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

First-hand observations of China, 1973, indicate the importance of motivation, and of the post-Cultural Revolution interaction between professionals and the masses. The motto "Serve the People" seems to permeate daily life. Occupational health, schools of public health, health organization, traditional medicine, statistical data, and contact of professionals and educators with the workers and peasants are discussed.

- 368 Wegman, M.E., Lin, Tsung-yi., Purcell, E.F. eds.** *Public health in the People's Republic of China: report of a conference*. New York, Josiah Macy, Jr. Foundation, 1973. 354p. Engl.

Individual papers have been abstracted separately under entries 022, 108, 128, 137, 187, 213, 231, 283, 297, 340, 361, 367, 422, 524 and 552.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

This report of a conference on health and health services in the People's Republic of China discusses the history of the public health movement, organization of services, health planning, participation by individuals and the community, auxiliary health workers and medical personnel, disease control, preventive medicine, maternal and child health, nutrition, and population policy.

- 369 Wei, Chien.**, *Medical sciences in New China*. Sante Publique (Bucharest), 8, 1965, 145-149. Engl.

During the years 1949-1965, the number of medical research workers in new China greatly increased; they were centred in special research institutes, large hospitals, and medical institutes (such as the Chinese Academy of Medical Sciences), which have increased in number from three in 1949 to 170 in 1965. In 1955, the Central Research Institute of Traditional Chinese Medicine was established in Peking to promote integration of traditional Chinese medicine and modern medicine. Prevention and treatment of infectious and parasitic diseases and diseases difficult to manage, industrial and agricultural production, basic medical theories, traditional Chinese medicine and pharmacology, are areas of research discussed here.

- 370 Wei, Chien.,** *China's rural medical and public health work.* Sante Publique (Bucharrest), 9, 1966, 321-323. Engl.

Every county in China is reported to have its own hospital from which rural health activities and the training of basic rural health workers is carried on. Medical teams are despatched to remote or inaccessible areas, administering medical care, conducting education programmes in hygiene, and promoting environmental sanitation.

- 371 Whitney, J.B.,** *Traditional and modern approaches to environmental management in China.* Toronto, University of Toronto, Dept. of Geography, May 1972. 23p. Engl. Unpublished document.

Paper presented to the Canadian Society for Asian Studies Conference, 26 May 1972.

The theme examined in this paper is that although the traditional man-made ecosystem of China was ecologically unstable, it was, for the most part, able to prevent any widespread or long-lasting environmental degradation. Although the nineteenth and the first part of the twentieth century saw evidence of increasing environmental deterioration due to the rise of long range transportation systems, urbanization, and industrialization, the Maoist developmental model introduced in the late 1950's indirectly and inadvertently has reversed some of these trends. China may now be reverting to the kind of environmental integrity characteristic of the traditional period, although the contradictions between developmental and ecological goals have not been fully explored by the leadership as yet. The paper concludes by noting, however, that the Chinese are beginning to reinterpret policies and programmes originally undertaken for other than environmental reasons in terms of the latter. (Author abstract.)

- 372 Wilenski, P.S.,** *Medical care systems in developing countries and the Chinese approach.* Forthcoming in the Contemporary China Series, Contemporary China Center, Australian National University, Canberra, Australia. Engl.

Individual chapters abstracted separately under entries 197, 373, 374 and 459.

Many developing countries have tried to move away from the traditional model of health care delivery, but only in China has the whole conventional system of health-worker roles and institutions been broken down and replaced by a labour-intensive model adapted to the goal of

economic development. As early as 1956, health activities were directed so as to have a maximum impact on increasing production. The relationship between health inputs and the economic growth rate were constantly kept in sight in Chinese policy. Emphasis has been placed on delivering medical care so as to assist production; thus in 1960 many medical institutions have sent workers to production sites, farms, and houses to treat illness and do preventive work. Preventive medicine is much more important than curative medicine in Chinese health policy. The wholesale transfer of these policies to other countries would be quite impracticable and undesirable, but there are many new ideas that should be considered by medical administrators in developing countries. At the First National Health Conference in 1950 it was decided that cooperation between doctors of traditional and Western medicine should be one of the principles on which medical work was to proceed; in view of the shortage of doctors and medicines, Chinese traditional medicine was to be utilized. However, traditional doctors assigned to work in hospitals had little status and were ignored by university-trained physicians. By the end of 1954 there were repeated denunciations of those who had ignored traditional medicine; by 1958 the Chinese Medical Association opened its doors to traditional practitioners. Stress on the intrinsic value of traditional medicine was greatly increased at the time of the Great Leap Forward. Training classes were established for doctors trained along Western lines to study traditional medicine. Over the years competition between the two groups has disappeared and been replaced by mutual cooperation and decision-making. Perhaps the most important aspect of public health policy in China is the mobilization of the entire population to carry out public health tasks — the "mass line" in public health which developed out of Communist Party experience during the struggle for leadership. It is a principle that is stressed at every medical conference and in directives on individual diseases. The theoretical basis of the mass line rests on direct contact between the masses and Party cadres who are instructed to study the view of the people, identify problems, and assess weaknesses and strengths. Mass mobilization for improvement of public health is carried out through the Patriotic Health Movement. The movement continues throughout the year with nationwide campaigns, which have concentrated on sanitary practices and elimination of the four pests and parasitic diseases. All means of communication are used

to explain the how's and why's to the people. The anti-schistosomiasis campaign is discussed in some detail. In 1958 more radical solutions for quantitative increase in doctors, facilities, and cheaper drugs for the rural areas were required. First, the administration centre of rural medical programmes was shifted to the commune, where the barefoot doctors were trained. Funds were organized under the collective medical care system, forerunner of the cooperative medical service. With Mao's directive in 1965 more mobile medical teams were sent to the villages in rotation, and a programme for training large numbers of barefoot doctors (agricultural/part-time medical workers) was put into effect. The various members of the rural health team and the training of barefoot doctors are described.

373 Wilenski, P.S., *Medical care systems in developing countries and the Chinese approach.* Forthcoming in Medical Care Systems in Developing Countries and the Chinese Approach, Contemporary China Series, Contemporary China Center, Australian National University, Canberra, Australia. Engl.

The Western model of medical care seems to have little relevance to the conditions and goals of developing countries, although this system is now the dominant one in those countries. Only in the People's Republic of China has government policy broken the conventional system of health worker roles and embarked on an innovative labour-intensive model. The government has first of all directed that health programmes serve production, both agricultural and industrial. Emphasis has also been placed on delivering medical care so as to minimize disruption of production, i.e. to go to the people and do preventive work. Preventive medicine takes precedence over curative medicine in Chinese health policy, an emphasis that has a sound economic basis, in that the cost of preventing a disease is usually less than the cost of treating it. In implementing this plan, it was decided that new methods and new types of health work had to be found, that traditional practitioners had to be integrated into the medical system, and that in addition to transferring doctors into the country or sending them out in mobile teams there was the need for a new health worker at the peasant level. The wholesale transfer of these policies to other countries would be quite impracticable, but there are many new ideas of value to medical administrators in developing countries.

374 Wilenski, P.S., *Mobilisation of the people for health work: a labour-intensive model.* Forthcoming in Medical Care Systems in Developing Countries and the Chinese Approach, Contemporary China Series, Contemporary China Center, Australian National University, Canberra, Australia. Engl.

China has mobilized the entire population to carry out public health tasks. This "mass line" in public health may be difficult to transfer to other countries in that it requires the entire organization of Party and State. The theoretical basis of the mass line rests on direct contact between the masses and Party cadres who are instructed to identify problems and assess weaknesses and strengths. The cadres report to the leadership who issue directives, which are in turn implemented by the population through the cadres. The mass line in health is at the centre of every directive and exhortation on health work. It is also applied to the methods adopted in prevention or curative work and to medical research. The leadership of nearly all health work is clearly in the hands of the Party. The major instrument for implementing mass mobilization for public health is the Patriotic Health Movement; campaigns, lasting some weeks, are usually nationwide and every means of communication is used to activate people for such tasks as street cleaning and burying snails. Since 1952, campaigns have concentrated on sanitary practices, and elimination of the four pests and of major parasitic diseases. In addition to regular campaigns, "shock attacks" are organized at particular times for special purposes. Propaganda for the health campaigns stresses three main elements: its importance to production, the mass line, and leadership by Party cadres. A detailed description of how the mass line was applied to the anti-schistosomiasis campaign is included.

375 Willox, G.L., *Observations on medical practices.* Bulletin of the Atomic Scientists (Chicago), 22(6), Jun 1966, 51-56. Engl. Also appears in Adams, Ruth, ed., Contemporary China, New York, Pantheon Books, 1966, 105-124, under the title Contemporary Chinese Health, Medical Practice and Philosophy.

Visiting Peking Medical College on a trip to China in 1966, a Canadian physician was told of increased student enrollment, staff, teaching facilities and a six-year medical programme similar to the one in Canadian medical schools. Great

emphasis is placed on public health and preventive medicine. Hospital medical care was observed to be excellent, as well as research facilities in Peking Medical College. At the Research Institute of Acupuncture and Moxibustion (of the Academy of Traditional Medicine, Peking) the author observed patients treated by acupuncture and moxibustion.

- 376 Woodley, J., *Doctor's journey into China.*** Eastern Horizon (Hong Kong), 12(1), Jan 1973, 7-27. Engl.

Having visited China in 1972, the author presents his observations. At the Sun Yat-sen Memorial Polyclinic, an outpatient department serving 2 000 patients daily, the combined use of Western and traditional methods of therapy, and abortion performed under acupuncture analgesia were observed. In this same hospital, cases of reimplantation surgery of the hands were observed to be progressing well. With respect to medical education, the author learned the following: students work for two years after high school; admission to the university requires academic ability, motivation, good health, and correct political thinking; and the training course has been reduced to three years with an emphasis on clinical training. At the Norman Bethune Peace Memorial Hospital, run by members of the People's Liberation Army, practical and theoretical aspects of acupuncture anaesthesia were observed. Concerning health services in rural areas, it was learned that 700 000 medical workers were living in the countryside.

- 377 World Council of Churches, Geneva. Christian Medical Commission. *Health care organization.*** In *Health Care in China: an Introduction*, Geneva, World Council of Churches, Christian Medical Commission, 1974, 33-52. Engl.

Mainland China's national health policies are made by the Ministry of Health, which is also ultimately responsible for medical research policy carried out under the auspices of the Chinese Academy of Medicine. Provincial and district health offices have responsibility for more specific aspects of health policy, such as the direction of sanitation, hospital administration, and deployment of health workers. Many policies are made by the local health care unit, which has the responsibility for dealing with its own problems. These units carry out both preventive and curative work and through a referral system they can rely on higher centres for more complex medical advice and treatment. Decentralization of health

services and the referral system have enabled the Chinese to establish health units throughout the country, making primary care available to all citizens. The basic organizing unit in health delivery is the hospital, administered by revolutionary committees. Central hospitals serve basic health care units in urban areas and the entire rural health care organization. Provincial, district, and municipal hospitals are located in major cities and are responsible for health care for their areas. Factory health stations and street health stations are the units most involved in community health work, i.e. emergency care, health education, family planning, inoculations, etc. In outlying areas, each county has a hospital, with commune hospitals at the next lower level and a health centre at the brigade level. The production team or village has a health station staffed by one or two barefoot doctors. Financial aspects of health services and the cooperative medical service of the communes are discussed.

- 378 World Council of Churches, Geneva. Christian Medical Commission. *Health care in China: an introduction.*** Geneva, World Council of Churches, Christian Medical Commission, 1974. 140p. Engl.

See also entries 126, 198 and 377.

Health care in China is discussed with reference to the following topics: the relationship of health to national development goals, health care organization, epidemic disease control, population policies, traditional and Western medical practices, manpower for health care, and prevention and treatment of mental illness. Chapters on Health Care Organization (Chapter 2), Epidemic Disease Control (Chapter 3), and Manpower for Health Care (Chapter 6) have been abstracted separately. References are listed at the end of the paper.

- 379 Worth, R.M., *Health trends in China since the Great Leap Forward.*** China Quarterly (London), 22, Apr-Jun 1965, 181-189. Engl.

Also appears in the American Journal of Hygiene (Baltimore), 78, 1963, 349-357 and W.M. Lin, ed., Chinese Society Under Commission: A Reader, New York, John Wiley and Sons, 1967, 395-404.

From the observation of 80 young children recently arrived in Macao from neighbouring rural districts of China, and 120 children of the same age group in Hong Kong, the following results

were obtained: 1) both groups had a high percentage of vaccination scars indicating an adequate preventive medical service; 2) the proportion of children from Chinese villages who had mumps was higher than those in the Hong Kong villages, indicating a very crowded environment and indirect evidence of existence of nurseries and kindergartens in rural communes; 3) with regard to faecal-oral transmission of tuberculosis, there is no evidence of the "patriotic health movement's" effect on village sanitation; 4) only a marginal intake of protein could be seen in both groups. Interviews with doctors who have come into Hong Kong from China revealed the following: 1) crop failures of 1959 gave rise to a severe food shortage and nationwide food rationing with increased incidence of infectious disease, oedema, liver enlargement, typhoid fever, etc.; 2) the food situation has begun to improve noticeably since 1962, and real progress is reported in the control of schistosomiasis, hookworm, malaria, and maternal and child care.

380 Worth, R.M., *Health and medicine*. In Wu, Y., ed., *China: a Handbook*, Newton Abbot, Devon, England, David and Charles Ltd., 1973, 657-668. Engl.

During the early 1950's Mao Tse-tung's government placed great emphasis on public health disease prevention and mass health education, with strong encouragement to learn by doing, seeing, and hearing. Clinical care was still largely confined to existing institutions in the city. The next step was to develop local health centres in rural areas; this was first seen to by giving official recognition to traditional medicine and to traditional practitioners as important elements of the

health system. The Great Leap Forward saw intensified campaigns against parasitic diseases, building of health centres in communes and health stations in production brigades, an outpouring of urban medical workers to the new rural health centres, and a drive to induce people to divulge their home remedies and persuade traditional practitioners to disclose secret prescriptions. The ensuing amalgamation of traditional and Western medicine is developing into a unique system wherein doctors of both schools consult each other in the cooperative treatment of patients. Whether a patient chooses one doctor or the other he will have about the same sort of treatment. The extension of modern medical services into rural areas has been assisted by touring mobile medical teams. In the field of family planning, it appears from interviews with women arriving in Macao from Kwangtung Province villages that the official family planning message has penetrated to the village women, especially the younger ones, but that as of 1965-66, this message had not been translated into action.

381 Yuan, Tung-li., ed., *China in western literature*. New Haven, Conn., Yale University Press, 1958. 802p. Engl.

This bibliography contains *inter alia*, a chapter (XXI) entitled *Medicine and Public Health*, which is further subdivided into: Bibliographies, Directories and Dictionaries, Chinese Drugs, Chinese Medicine, Western Medicine in China, Hospital and Medical Schools, Public Health, and Chinese Food and Cookery. Most of the references cited are pre-1949.

V.2 Health Care Organization and Planning - Rural

See also: 129, 158, 171, 363

- 382 American Consulate General, Hong Kong.** *Send medical care and medicine to the homes of the peasants.* Selections From China Mainland Magazines (Hong Kong), (490), 20 Sep 1965, 11-14. Engl.

The movement of city medical workers to the countryside is reported. Besides giving personal medical attention to villagers the roving medical teams set up medical wards and brigades in the communes. Doctors go to schools, peasant association meetings, and women's groups to carry out health education. The mobile medical units also train health workers and midwives.

- 383 American Consulate General, Hong Kong.** *Cooperative medical service welcomed by the poor and lower-middle peasants.* Current Background (Hong Kong), (872), 28 Feb 1969, 1-43. Engl.

Several short articles report on the Cooperative Medical Services of the rural communes. Under this system each person pays an annual cooperative fee of one yuan. In addition each production team pays ten fen for each member who subscribes to the medical service. Each commune member pays five fen for every treatment and is given free medicine. The experiences of several communes where this cooperative payment scheme is in operation are related.

- 384 American Consulate General, Hong Kong.** *Orientation of revolution in medical education as seen from the barefoot doctors: an investigation report.* Selections from China Mainland Magazines (Hong Kong), (628) 23 Sep 1968, 3-9. Engl.
Translated from *Hung-ch'i (Red Flag)*, (Peking), No.3, Sep 1968 and also appears in *Peking Review* (Peking), 11(38), 20 Sep 1968, 18-22. See entry 171 for abstract.

- 385 American Consulate General, Hong Kong.** *"Five-sister medical team" in northeast China.* Survey of China Mainland Press (Hong Kong), (4377), 17 Mar 1969, 15-16. Engl.

In a rural area of northeast China, five young barefoot doctors are reported to have cured many ailments using acupuncture. These young girls were given a short course by a People's Liberation Army medical team, and then returned to their work in the fields as part agricultural - part medical workers.

- 386 American Consulate General, Hong Kong.** *China trial-produced new light medical apparatus.* Survey of China Mainland Press (Hong Kong), (4446), 30 Jun 1969, 21-22. Engl.

At the institute of experimental medicine of the Chinese Academy of Medical Sciences, new lightweight medical apparatus for use by rural medical workers is being trial-produced. Such equipment includes a transistorized ultraviolet therapeutic unit, and a transistorized multiple-pulse series stimulator.

- 387 American Consulate General, Hong Kong.** *Minority nationality "barefoot doctors" serve the people wholeheartedly.* Survey of China Mainland Press (Hong Kong), (4442), 24 Jun 1969, 19-20. Engl.

Remarkable changes in medical services are reported in the mountainous areas of Yunnan Province since barefoot doctors have been trained. Inspired by the words of Chairman Mao, these auxiliary health workers devotedly served the peasants of their region.

- 388 American Consulate General, Hong Kong.** *Shop assistant becomes spare-time barefoot doctor.* Survey of China Mainland Press (Hong Kong), (4431), 6 Jun 1969, 23-25. Engl.

A shop assistant who travelled to rural areas to sell goods began to take with him some commonly used medicines, which he delivered to peasants. He studied herbal prescriptions and began to treat people in the countryside. His treatment of illness amongst the rural people is described.

- 389 American Consulate General, Hong Kong.** *East China hsien sets up rural medical and health service network.* Survey of China Mainland Press (Hong Kong), (4448), 3 Jul 1969, 22-23. Engl.

In Kiangsu province of East China, a country-wide rural medical and health service network had been established by 1969. At that time all 715 production brigades had set up a clinic staffed by one or two barefoot doctors, a midwife, and medical workers who had moved away from cities. The shortage of doctors and medicine in this area has been overcome and as a result production rates have apparently been stimulated.

- 390 American Consulate General, Hong Kong.** *Chinese PLA contributes to rural health work in accordance with Chairman Mao's directive.* Survey of China Mainland Press (Hong Kong), (4442), 2 Jul 1969, 19-21. Engl.

Medical teams of the People's Liberation Army have made new contributions to medical and health work in the rural areas of China. These teams have trained barefoot doctors in the villages, explored the sources of Chinese medicine, and assisted the communes and production brigades in improving their cooperative medical service. By mid-1969, 4 000 PLA medical teams with more than 30 000 members had gone to rural areas. Many teams have investigated effective ways of treating common and recurrent diseases in these areas.

- 391 American Consulate General, Hong Kong.** *Army unit relies on poor and lower-middle peasants in revolutionizing rural medical work.* Survey of China Mainland Press (Hong Kong), (4342), 21 Jan 1969, 18-20. Engl.

Medical units of the People's Liberation Army helped rural communes train their own part-time medical workers. During their training, students followed Mao Tse-tung's teachings, participated in physical labour, and prevented and cured diseases. Vigorous public health programmes led by the propaganda-medical team brought much-needed changes in living conditions for villagers.

- 392 American Consulate General, Hong Kong.** *Medical school for "barefoot doctors".* Survey of China Mainland Press (Hong Kong), (4402), 25 Apr 1969, 18-20. Engl.

At a part-time farming, part-time study medical school in Shensi province, a large number of barefoot doctors have been trained. The school has made a point of being self-reliant and students are required to do manual work at the school for three months, return to work in their own production teams for three months, and

study at the school for six months. The school teaches the medical skills of both modern and traditional Chinese medicine, the stress being placed on learning through practice.

- 393 American Consulate General, Hong Kong.** *Mao Tse-tung thought propaganda team takes medical teachers and students to countryside.* Survey of China Mainland Press (Hong Kong), (4387), 1 Apr 1969, 16-17. Engl.

Teachers and students of the Hopei Medical College, under the leadership of a worker/PLA (People's Liberation Army) thought propaganda team, went to the rural areas in 1969 to treat the peasants and at the same time be reeducated by them.

- 394 American Consulate General, Hong Kong.** *How she devotedly serves the commune members for the last five years: story of Tung Hai-chen, health worker of Hsototzu production brigade, Wanhsiang commune.* Selections From China Mainland Magazines (Hong Kong), (595), 2 Oct 1967, 24-28. Engl.

Translated from Liaoning I-hsueh (Liaoning Medicine), (3), 1 Mar 1966.

This article, supplied by the health bureau of Haich'eng hsien, Liaoning province, tells how a young girl with only primary school education becomes a devoted medical worker in a commune. Coming from a poor peasant family, Tung Hai-chen received her training as a health worker in the Anshan Health Institute, in the autumn of 1960, and started to work in the following year. She took care of the more than 300 families in the seven production teams of her brigade. She did not possess any deep knowledge of medicine but dared to take responsibility and tackle difficulties. The achievements she made are said to be incredible. (Journal abstract.)

- 395 American Consulate General, Hong Kong.** *Investigation report on how the Ch'unhsing brigade in Ch'unchiang (Kukong) Hsien, Kwangtung Province firmly adheres to co-operative medical service over the past eleven years.* Selections from China Mainland Magazines (Hong Kong), (642), 27 Jan 1969, 27-33. Engl.

Translated from Hung-ch'i (Red Flag), (Peking), No. 1, 1 Jan 1969.

The experiences of the Ch'unhsing Production Brigade in adhering to the Cooperative Medical Service are presented for study. This brigade adopted the system in which the production brigade, the production teams and the commune members jointly pay for medical expenses and discuss this once a year according to changing needs. These measures have been welcomed by the peasants.

- 396 American Consulate General, Hong Kong.** *Barefoot doctor serves the poor and lower-middle peasants wholeheartedly.* Survey of China Mainland Press (Hong Kong), (4455), 15 Jul 1969, 16-18. Engl.

The work of a barefoot doctor with the peasants of a south China village is greatly praised. With only three years previous education this health worker was admitted to a class run by the county to train auxiliary personnel in basic traditional and Western techniques. The barefoot doctor's devoted efforts to help peasants in remote areas are described in detail.

- 397 Australian Nurses Journal, Melbourne.** *Chinese give medicine high priority.* Australian Nurses Journal (Melbourne), 2(18), 14 Dec 1972. Engl.

An Australian physician comments on health services in China, as observed during a visit in 1972. Aspects of health and medicine briefly mentioned here are rural health, barefoot doctors, preventive medicine, physician education, traditional medicine, and acupuncture analgesia.

- 398 Ch'ien, Hsin-chung.,** *Prelude to health work marching on the countryside: some problems concerning the work of mobile medical teams for the countryside.* Selections from China Mainland Magazines (Hong Kong), (505), 3 Jan 1966, 13-24. Engl.
Translated from Hung-ch'i (Red Flag), (Peking), (13), 6 Dec 1965.

It is reported that in the spring of 1965 thousands of mobile medical teams organized to move into the countryside. While working for the prevention and control of diseases these teams trained new personnel, popularized health knowledge, and conducted sanitation campaigns. The directions to be taken by these teams in their future work are discussed.

- 399 Ch'in, Po-wei.,** American Consulate General, Hong Kong. *Heilungkiang traditional*

Chinese art of healing and medicine. Selections From China Mainland Magazines (Hong Kong), (598), 23 Oct 1967, 20-25. Engl.

Speech delivered at the Heilungkiang Academic Conference on Traditional Chinese Art of Healing and Medicine, Harbin, 1 Nov 1965.

Delegates attending a conference on traditional Chinese medicine are urged to promote the practice of Chinese medicine for the benefit of the masses. At the time of the conference there were few practitioners of traditional medicine in the rural areas, their technical standards were relatively low and there was also a shortage of traditional medicines. For this reason urban practitioners of traditional medicine must help raise the rural doctors' technical standards, and must train new practitioners of traditional medicine. The economic advantages of traditional medicines are pointed out.

- 400 Ch'in, Po-wei.,** American Consulate General, Hong Kong. *Correctly mastering and applying the law of diagnosis for treatment.* Selections from China Mainland Magazines (Hong Kong), (598), 23 Oct 1967, 25-28. Engl.

Speech delivered at the Heilungkiang Academic Conference on Traditional Chinese Art of Healing and Medicine, Harbin, 1 Nov. 1965.

Research work concerning traditional Chinese healing must examine methods of diagnosis. Diagnosis is made by practitioners of traditional Chinese medicine by examining the pulse, the three sections of the body, and the internal organs. The author states that in the practice of cooperative medicine (a combination of Western and traditional Chinese) consideration should be given first to Chinese medicine. He advocates a system of medical practice in which the law of (traditional) diagnosis for treatment is mastered and applied to most cases, and the results are verified by diagnosis of Western medicine. The author stresses the importance of studying Chairman Mao's writings and putting the thought of Mao Tse-tung into practice. In the case of traditional Chinese medicine this means inheriting and developing the "motherland's medicine", absorbing its quintessence, discarding the drugs, and adjusting and improving upon it.

- 401 Chang, Kai.,** *Health work serving the peasants.* Peking Review (Peking), 8(50), 10 Dec 1965, 12-16. Engl.

Based on the belief that agriculture is the foundation of the economy, China's medical and health work is turning its main attention to the rural areas. Over the long term, this will also diminish the differences between farm and country, thus strengthening socialist construction. Toward this end, existing medical forces have been mobilized and large numbers of rural health workers are being trained. The touring urban medical teams give treatment, help the production teams to train their own health workers and the brigades their own part-time doctors. This is also a way of revolutionizing intellectuals. Medical schools are organizing short courses to train part-time doctors for rural commune clinics. These courses require two or three years of studying in the slack agricultural season, at a county hospital. These medical workers are prepared to treat minor injuries and diseases. Three-year courses have been set up in some medical colleges to train doctors for the rural communes. It is anticipated that eventually every production team would have one peasant health worker, and every production brigade one part-time doctor. China's main achievements in health work since Liberation include the following: 1) destruction of the "four pests," 2) lowered incidence of infectious, parasitic, and endemic diseases, 3) improved conditions in factories, 4) establishment of county hospitals and commune clinics, 5) increased numbers of medical school graduates, 6) cooperation between practitioners of traditional and Western medicine, etc.

- 402 Chao, Ling-chu.,** *Aid to rural medicine.* China Reconstructs (Peking), 9, Nov 1960, 9-11. Engl.

Urban and rural hospitals in the People's Republic of China are cooperating to improve medical care in the countryside. The example of cooperative experiences between Tungjen Hospital in Peking and the Tahsing County Hospital are discussed. In 1958 the first medical team from Tungjen Hospital moved to the county hospital for an extended stay. The team has raised the medical and training standards for local personnel and has helped set up a county network including hospitals in the communes and health stations in the production brigades. While undertaking treatment of patients at the Tahsing hospital, team members passed on their knowledge to regular staff members through consultations,

on-the-spot demonstrations, and bedside lectures. New departments have been opened and the hospital can now handle many more cases than previously. An important aspect of this cooperative effort is to help both the county and communes carry out the policy of "prevention first."

- 403 Chen, Wen-chieh., Ha, Hsien-wen.,** *Medical and health work in New China.* Montreal, McGill University, 25 Nov 1971. 25p. Engl.

Unpublished document.

Address delivered at the McGill University Sesquicentennial, The Norman Bethune Symposium, Nov 25 1971.

In the People's Republic of China, medicine and public health have adhered to Mao's directives to: 1) serve workers, peasants, and soldiers, 2) put prevention first, 3) unite traditional and Western-type physicians, and 4) integrate health work with mass movements. Mobilization of the masses for participation in a patriotic health movement, mass prevention, and treatment of epidemic and acute infectious diseases has resulted in lowered morbidity and mortality rates over the last 23 years. Following the Cultural Revolution, many physicians and professors have gone in groups to factories, rural districts, and outlying areas for voluntary service and "reeducation." Some moved permanently; others joined mobile medical teams. In the countryside barefoot doctors numbering more than one million provide part-time medical service. A cooperative medical service has been adopted by 76 percent of all production brigades. The integration of Chinese and Western medicine has resulted in new uses for acupuncture in surgery, in severed limb reimplantation, treatment of burns, and so on.

- 404 Cheng, T.O.,** *China's "barefoot doctors".* Prism (Chicago), Apr 1973, 17-19. Engl.

The forerunner of the barefoot doctor appeared in China during the Great Leap Forward when agricultural workers were given part-time medical training that allowed them to continue on their regular jobs in the communes. By June 1960 there were 3 900 such health workers in the 2 500 production brigades of Shanghai municipality. The Cultural Revolution brought about the present version of the barefoot doctor, whose counterpart in industry is the worker doctor, and in neighbourhoods the Red Guard doctors. During the slack agricultural season, the barefoot

doctors learn both Western and traditional medicine. They receive the usual income of a farm worker. Duties vary from province to province but generally include immunization, sanitation, first aid, emergency minor surgery, education for birth control, and primary medical care. The barefoot doctor's work is supplemented by physicians from mobile teams, and the commune physician. Training programmes usually cover a six-month period with about three months of formal courses and three months of supervised clinical work. Many barefoot doctors apply and are accepted for university medical education. The new three-year programme includes training in traditional medicine, periods of study and work in the communes, physical and military training, in addition to medical and clinical courses. Rotation of medical personnel from urban hospitals into the countryside is designed to provide medical care, help train the barefoot doctors, and reeducate doctors in the problems of the peasants. It is concluded that workers such as the barefoot doctor can be effectively used only in a structured system of medical care where free and frequent consultation, continuing education, easy accessibility and referral, and effective mechanisms of communication and quality control are available.

405 China Reconstructs, Peking. *Hospital on camelback*. China Reconstructs (Peking), 20(9), Sep 1971, 39-41. Engl.

Acts of bravery on the part of army medical workers in isolated areas of Mongolia are related. It is claimed that the total dedication of health workers to Mao's directives has brought health care to people who formerly had no care whatsoever.

406 China Reconstructs, Peking. *Barefoot doctors*. China Reconstructs (Peking), 18, Mar 1969, 34-37. Engl.

China's barefoot doctors are agricultural workers who diagnose and treat common illnesses on a part-time basis. Some examples from the daily life of a barefoot doctor indicate the type of health assistance they perform.

407 China Reconstructs, Peking. *Hospital on the road of revolutionization*. China Reconstructs (Peking), 18, Mar 1969, 11-13. Engl.

Revolutionary changes have taken place in the Kwangtung Provincial People's Hospital, since the Cultural Revolution. Bold reform of unreasonable rules and regulations, infusion of the

Hospital with vigorous political spirit, open discussion of cases with patients, and doctor-nurse cooperation are only a few of the changes that have been brought about.

408 China Reconstructs, Peking. *Everybody works for good health*. China Reconstructs (Peking), 20(11), Nov 1971, 20-22. Engl.

One village's experience in collecting medicinal folk remedies and in organizing a simple clinic is described. Following a clean-up campaign in the village, the incidence of disease dropped and agricultural production increased. Army personnel played an essential role in the early stages of the health programme, primarily as first-aid workers.

409 China Reconstructs, Peking. *Health and medical care for the people*. China Reconstructs (Peking), 20(6), Jun 1971, 2-5. Engl.

Large numbers of barefoot doctors are a new force in improving China's rural health conditions. Each production brigade has two or three of these health workers, commune members who have taken courses in medical treatment. Since 1966, 300 000 urban medical workers have gone to the countryside and some 400 000 more have been organized into mobile teams. More than half the brigades in the country have adopted the cooperative medical system. More and more of the serious diseases are being cured in the countryside.

410 China Reconstructs, Peking. *Miracle of surgery*. China Reconstructs (Peking), 17, Oct 1968, 28-31, 46. Engl.

The dramatic surgical case in which a 45-kg tumour was removed from a woman by a team of People's Liberation Army medical personnel is described.

411 China Reconstructs, Peking. *Producing medical equipment for the peasants*. China Reconstructs (Peking), 18, Nov 1969, 39-41. Engl.

In keeping with Mao Tse-tung's directives that medical work be stressed in the countryside, a factory's Revolutionary Committee asked what kinds of medical equipment the countryside needed. Groups sent to investigate the needs of rural medical workers, found that three problems needed immediate solution: 1) a shortage of medical equipment, 2) present equipment was not sufficiently portable, and 3) medical equipment was too expensive. The group then began

designing and producing light-weight apparatus for various medical uses in rural conditions. These have been welcomed by patients and medical personnel.

412 China Reconstructs, Peking. *Rural cooperative medical service.* China Reconstructs (Peking), 18, Jun 1969, 15-18. Engl.

In China's rural cooperative medical service, each commune member pays about two and one-half days earnings per year to the cooperative fund. The old polyclinics were changed into commune-owned health stations where doctors were paid a fixed salary. Each commune has around 10 000 members, thus creating a considerable health service fund. The commune health station has a simple operating room and a number of beds. Each brigade has midwives and barefoot doctors; each team in a brigade has a health worker. Cases that cannot be handled by the commune are sent to county hospitals. The government encourages and supports the commune's cooperative medical service. Barefoot doctors have become the main force in the cooperative; among other things, they deliver preventive medicines provided by the state to the peasants and see they are properly taken.

413 China Reconstructs, Peking. *Drastic price cuts on medicines.* China Reconstructs (Peking), 19(1), Jan 1970, 26-27. Engl.

Price reductions on medicines in 1970 brought prices down to about 80 percent below 1950. Some of the biggest cuts, according to this report, were on penicillin, analgesic tablets, sulfa tablets, etc. At the same time, prices of medicines were standardized. Pharmaceutical workers went into the rural areas to get the suggestions of the peasant, and returned to produce medicines for common and recurrent diseases.

414 China-Analysen, Frankfurt. *Kampagne zur verlagerung der gesundheitsarbeit aufs land. (Campaign to develop rural public health service).* China-Analysen (Frankfurt), 9, Feb 1970, 17-22. German.

An important aspect of the Cultural Revolution in China has been the decentralization of public health service administration and the subsequent development of rural health units. Organization at the rural level has involved 1) the permanent settlement of physicians (reportedly, about 50 percent of the total number), nurses, and other medical personnel in villages and rural regions, and 2) the development at the local level of a health insurance programme financed by the

farm workers belonging to the individual workers' brigades and people's communes. The new public health campaign was started in 1969 and focussed on preventive and curative work stressing sanitary matters (like eradication of flies, bugs, rats, etc.). The new system made use of revolutionary village committees for seeing that intelligent and effective public health care would be developed, with two public health campaigns to take place each year, one in early spring and one in midsummer. The programmes for rural public health services stress preventive work (inoculation; care in the handling of food and water, and disposal of human wastes; and also birth control, which as yet is not practiced using the pill). Herbal medicine and folk medicine are supported officially by the central authorities (Peking) for both ideological and financial reasons. Western and Chinese-manufactured drugs appear to be available in rural hospitals, outpatient clinics and health units in adequate quantities, at least in urgent cases. Top surgeons are still highly regarded in China (e.g. those attaching severed limbs, etc.). However, the development of rural health units, in which personnel including barefoot doctors could be trained for certain first aid measures, has been of great use. The campaign in question has brought acupuncture back into the immediate medical picture. In most regions, the production brigades are the operative units for the new rural health insurance system; regional and district committees are also involved. Local autonomy is stressed in administrative matters. Methods of hospital budgeting and making of payments are mentioned. The whole training of medical personnel is designed to use medicine as a social service.

415 Chinese Literature, Peking. *Good doctors for the poor and lower-middle peasants.* Chinese Literature (Peking), (12), 1968, 56-66. Engl.

This article relates the activities of the barefoot doctors in delivering health care to China's villages. The life and work of the peasant doctors, as well as their close relationship with villagers, are described.

416 Chun, Chih., Cheng, Ying., *Medical service for the sea islands.* China Reconstructs (Peking), 19(11), Nov 1970, 39-41. Engl.

The experiences of a People's Liberation Army medical team on an island in the South China Sea are related. Prevention and treatment of common and frequently occurring diseases is their most important work. The team helped the

people see the importance of medicinal herbs to augment regular medicine and make the island more self-sufficient. They ran short courses to train health workers in simple treatment methods and the use of medicinal herbs.

- 417 Current Scene, Hong Kong. *Mao's revolution in public health.*** Current Scene: Developments in Mainland China (Hong Kong), 6(7), 1 May 1968, 1-10. Engl. Editorial.

Sources from mainland China press and radio indicate that Chairman Mao did, in June 1965, order a dispersal of medical and health workers from cities to the countryside. Apparently the response from national, provincial, and municipal health authorities was to assign additional personnel to roving medical teams already in operation, rather than assign medical personnel permanently to the countryside. It appears that in 1968, however, urban physicians were finally being transferred to rural communes; Mao's public health proposals were apparently being carried out on a large scale. The plan to train health workers who can treat simple ailments has merits from the practical point of view over the short term. However, the author cautions that such a programme involving lowered educational standards and technical skills could prove self-defeating over the long term.

- 418 Current Scene, Hong Kong. *Public health developments - continued focus on the farms.*** Current Scene: Developments in Mainland China (Hong Kong), 7(24), 15 Dec 1969, 1-12. Engl. Editorial.

Improved health for farmers is a genuine goal of the People's Republic of China and the level of public health probably is improving in the countryside with increased access to medical services. Aspects of this progress include the use of herbal medicines and traditional practices, the training of barefoot doctors, and a population planning programme. A campaign to transfer doctors to the outlying areas began in 1967, and a rural health insurance scheme, the Cooperative Medical Service, was launched on an experimental basis in 1966. The method of administering the rural programme was intended to foster the goals of local self-reliance. The overall rural health campaign stresses preventive medicine, the cure and eradication of persistent diseases, and birth control. Considerable emphasis has been placed on the use of acupuncture and a major effort has been to train health workers in

this field. In many areas the People's Liberation Army were administering the health campaign. Two mass sanitation campaigns annually (spring and summer) and frequent "shock attacks" against flies, mosquitoes, rats, etc. have become institutionalized. This "Patriotic Health Movement" provides a vehicle for mobilization of vast numbers of people to fill in ditches, sweep the streets, transport garbage, etc. The long-term effect of concentrating health services in the countryside will be a reduction in the level of medical services in urban areas, and a drop in the professional qualifications of medical school graduates.

- 419 Current Scene, Hong Kong. *Mao-Liu controversy over rural public health.*** Current Scene: Developments in Mainland China (Hong Kong), 7(12), 15 June 1969, 1-18. Engl.

This paper, based primarily on quotes and references from Chinese published works, attempts to describe the disagreements between Liu Shao-ch'i, then (1966) Chief of State of the Chinese People's Republic, and Mao Tse-tung over measures for coping with public health problems in China's countryside just prior to the Cultural Revolution. In its broadest terms, the conflict between the "two lines," as Chinese propaganda phrased it, was cast in terms of central government versus local government for rural health care. Liu was attacked for wanting the central government to finance the rural health programme on the grounds that local bodies were not able to bear the financial burden on their own. The Maoists, on the other hand, had contended that such a burden was bearable at the local level and must be borne there. During the latter half of 1965 after an angry blast from Mao accusing the Ministry of Public Health of neglecting the rural areas in favour of urban areas, there was a heavy barrage of editorials, conferences, and symposiums, all insisting that health units shift their emphasis to rural areas where 85 percent of the population lives. Propaganda at that time stressed Mao's concern for peasant health and featured the rapid mushrooming of mobile medical teams for rural areas. An examination of the differences between Liu and Mao on medical training and greater use of traditional Chinese medicine as opposed to modern or Western medicine is also made. The radical change in the coverage and format of the *Chinese Medical Journal* (China's Medicine after October 1966), one of the few professional journals published in English for distribution to the

outside world prior to the Cultural Revolution, is also traced.

- 420 Dimond, E.G.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Medical care in urban and rural areas*. In Topics of Study Interest in Chinese Medicine and Public Health: Report of a Planning Meeting, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH)72-395, 1972, 57-59. Engl.

Planning meeting on topics of study interest in Chinese medicine and public health, Bethesda, Md., Mar, 15, 1972.

During the Cultural Revolution one-third of all urban hospital facilities were devoted to providing rural medical care. Based at the regional commune hospital, medical workers went on foot to villages and fields, providing medical care, giving medical students instruction at night, and giving continuing education to medical personnel serving in the countryside. The barefoot doctor, who farms most of the time and maintains health records, etc. the rest of the time, is given a six-week training course (this varies between regions). His availability, his immediate access to more skilled help, his continuing education and possibility of upward mobility make him an impressive member of the health team.

- 421 Fan, Yao.,** *Revolutionary medical workers go to the countryside*. China Reconstructs (Peking), 17, Dec 1968, 35-37, 52. Engl.

Peking medical teams have made outstanding contributions to the health and hygiene of the peasants in a northwestern province of China. Some of their experiences in remote areas are related. The teams' most important functions include creating a more sanitary environment and training health workers.

- 422 Heller, P.S.,** *Strategy of health-sector planning in the People's Republic of China*. Ann Arbor, Michigan, Center for Research on Economic Development, University of Michigan, Jul 1972, 62p. Engl.

Also appears in Wegman, M.E., Lin, T., and Purcell, E.F., eds., *Public Health in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 62-108. See entry 368.

This is an analysis of China's strategy for delivery of preventive and curative health services, with evaluation of its potential importance for

other less developed countries. In 1949, China's underdevelopment was characterized by extensive food shortages, a wide range of endemic diseases, extremely high infant mortality and crude mortality rates, meagre health facilities, and few physicians. After 1958, through the mobilization and utilization of resources, an alternative strategy for curative health care was seen to emerge. Prior to the Cultural Revolution, health strategy concentrated on a preventive health program characterized by mass campaigns, establishment of a basic preventive health infrastructure, mass mobilization of the labour force, and integration of health and agricultural objectives. During the Cultural Revolution, the inadequacy of rural health services mirrored in the poor health of the people became apparent; thus innovations in health care delivery were introduced. These included support of traditional medicine as an integral part of the health care programme, establishment of separate colleges for Chinese medicine, and acceptance of integration of traditional medical practitioners with modern physicians. A second development during the Cultural Revolution was the pressure on urban physicians to focus research efforts on rural problems and to orient medical students to services in these areas. Thus medical courses have been shortened and clinical work given an increased emphasis. Reallocation of urban medical personnel to rural areas is another attempt to redress the severe inadequacy of rural health service. The post-1965 curative health policy stressed: 1) further decentralized health institutions at the family, production team, and production brigade levels; 2) use of mobile medical teams to link these institutions with the health centre; 3) reorganization of the commune health centre; 4) training of semi-skilled medical personnel (barefoot doctors). The programme's success lay in establishing brigade health stations, training of barefoot doctors, and integrating agricultural production and health. In considering which elements of the Chinese strategy are likely to be transferable the following can be said: 1) in view of the imbalance between preventive and curative services in China, other less developed countries may find the usefulness of the foregoing measures limited; 2) the Chinese were fortunate in having a substantial medical background with a stock of practitioners to exploit it. Although other less developed countries have comparable groups of practitioners, are their traditional technologies viable enough to allow their integration in a health system?

- 423 Ho, Piao.,** (*Health units should have the aiding of agriculture as its first duty*). Hung Ch'i (Red Flag), (Peking), (18), 1960, 12-20. Chinese.

Also appears in China Reconstructs (Peking), 10, Feb 1961, 23-25, under the title 'Health Work Aids Agriculture'.

Party members and health unit workers of the People's Republic of China are to join farmers and the populace to eradicate the four pests (sparrows, flies, mosquitoes, rats), to improve the farmers' health conditions, to visit the sick in their homes, to amalgamate Chinese and Western medicine, and to improve medical skills so as to transform the rural areas. The movement so far has not been balanced; there are indications of shortsightedness and lack of long-term planning. The direction to be taken by health workers is: 1) to further confirm the ideology that agriculture is the basis of the country, 2) to join the production line, to improve rural hygiene while working and living with the people, 3) to establish a network of health units across the rural area using city hospitals as nuclei and to establish and intensify cooperation between city and rural hospitals, and 4) to cultivate and train large numbers of health workers in the rural areas efficiently and economically.

- 424 Horn, J.S.,** *Facing the countryside*. In Horn, J.S., *Away With All Pests: an English Surgeon In People's China 1954-1969*, New York, Monthly Review Press, 1969, 129-146. Engl.

The most important way of putting into effect China's health policy of orientation towards the countryside has been sending of mobile medical teams from the towns to the countryside. These teams, comprised of nurses, laboratory workers, administrators and doctors, leave the hospital to serve People's Communes and scattered villages. The usual period of team service is one year. Six tasks of the mobile medical team are the following: 1) to provide preventive services (immunization, water treatment, health education, waste disposal), and curative services (in central clinics, small village clinics, and homes); 2) to train auxiliary medical personnel from among the local people (peasant doctors or barefoot doctors, sanitary workers, and midwives); 3) to carry the policy of planned parenthood to the countryside; 4) to raise the level of medical services in the countryside; 5) to assist the patriotic health campaign; 6) to deepen the team members' understanding of the labouring people and strengthen

their socialist thinking. The last of these is the key to the accomplishment of the other five.

- 425 Horn, J.S.,** *Health and the peasants*. In Horn, J.S., *Away With All Pests: an English Surgeon in People's China 1954-1969*, New York, Monthly Review Press, 1969, 124-128. Engl.

Poverty and ignorance created for China's rural population a situation of physical ill health, crippling social and financial burdens, a complete lack of sanitation, rampant infectious disease, and a crude death rate of 30-40 per 1 000. First steps taken by the Communist Government included bringing together the traditional and modern doctors, mass campaigns against flies, rats, bedbugs, and mosquitoes, training of more doctors, standardization of curriculum for traditional doctors, etc. In 1958, large-scale collectivization and the establishing of People's Communes created the political, social, and economic conditions to support a rural welfare service. Early in 1965, in response to Mao's directives, health services were oriented increasingly toward rural areas. Several thousands of medical workers left the towns and settled in rural areas. China's new health policy's insistence on attention to the labourers and peasants has significance for the people of Asia, Africa, and Latin America, in fact for all countries where doctors tend to gravitate from poorer areas to richer ones.

- 426 Horn, J.S.,** *Building a rural health service in the People's Republic of China*. International Journal of Health Services (Farmingdale, N.Y.), 2(3), Aug 1972, 377-383. Engl.

Prior to the revolution in China, rural health services were virtually nonexistent. The countryside was ravaged by epidemics and millions of landless peasants suffered from gross malnutrition. Venereal disease and schistosomiasis were rampant. Solution of the problems arising from insufficient medical personnel in the countryside was sought by the following means: redistribution of existing medical forces was accomplished by encouraging volunteer doctors, nurses, and health technicians to move from the city to the countryside; the People's Liberation Army established a network of medical schools, hospitals, and clinics to bring medical services to the people; and mobile medical teams from city hospitals work on a rotational basis in the countryside. A key element in the creation of new

rural health forces has been the training by mobile medical teams of paramedical workers from among the peasantry. Young peasants selected by their fellow villagers receive basic and continuing medical training and live and work among the people as peasant doctors. By this means, it is hoped that within a few decades China will have a huge army of medical workers, firmly rooted in the countryside, dedicated to serving the health needs of 500 million peasants. (Journal abstract.)

- 427 Horn, J.S.,** *Experiments in expanding the rural health service in People's China.* In Wolstenholme, G., O'Connor, M., eds., *Teamwork for World Health*, London, Ciba Foundation Blueprints, J. and A. Churchill, 1971, 77-87. Engl.

Discussion follows on pp.87-93.

China's approach to building a nationwide health team where none previously existed is described. Two possible ways of providing health service for deprived rural areas, both of which have been used in China, are: 1) redistribution of existing medical manpower and resources; and 2) training of new forces, enlarging the health team. Redistribution was achieved by sending doctors out of the cities to rural areas (as volunteers) and by despatching mobile medical teams from urban hospitals to rural areas on a rotation basis. From firsthand experience with a mobile medical team the author relates activities (curative and preventive) performed by nurses and doctors under primitive conditions. Expanding the medical force has meant an increase in the number and intake of medical schools, expanded training of traditional doctors, nurses, sanitary technicians, etc. The training of barefoot doctors is a task of the mobile medical team, giving peasants a four-month crash course on basic anatomy and physiology, diagnosis and treatment of simple diseases, and essentials of public health. Weekly visits by a mobile team member to the village for consultation provided for continuing education of the barefoot doctor. The plan is to continue this cycle of three annual four-month training sessions with continuing education, leading to full qualification. The following features of the Chinese experience have relevance, especially for the developing countries: 1) the principle of relying on the ordinary people; 2) self-reliance on a national scale; 3) the rural health worker retains his roots in the community and his medical work is part-time and voluntary; 4) medical education of rural health workers should a) combine theory and

practice at all stages, b) be carried out in the countryside, c) suit the locality, d) be continuing.

- 428 Hsia, Chin-o.,** *Dedicate my red heart to the commune members: how I carry on health work.* Selections from China Mainland Magazines (Hong Kong), (596), 9 Oct 1967, 30-36. Engl.

Translated from Shan-tung I-k'an (Shantung Medical Journal), (1), 5 Jan 1966.

A brigade health worker recounts some of his experiences in village health care.

- 429 Hu, Chang-tu.,** *Public health and welfare.* In Hu, Chang-tu, China: its people; its society; its culture, New Haven, Human Relations Area Files Press, 1960, 393-409. Engl.

The policies of the People's government with respect to public welfare are discussed. It is noted that a curious mixture of humanitarian idealism and power politics is present in the Communist attitude toward public welfare, health, and social problems. Welfare programmes are set up with three groups in mind: soldiers, children, and workers. To meet emergencies such as famine the government has adopted a five-part "self-help" relief programme involving preventive action, disaster area control, secondary occupations, direct relief and resettlement, and outside assistance (i.e. from other sectors of society). Social problems such as prostitution, begging, and juvenile delinquency have been effectively brought under control. In the health field, faced with an acute shortage of medical personnel, the government is reviving and encouraging the use of traditional medicine. Hospitals admit traditional physicians and they work well with Western-trained doctors. As of 1960, tuberculosis, trachoma, small-pox, and diseases associated with childbirth were responsible for a large percentage of the death rate. One-fourth of the total death rate is attributable to diseases such as schistosomiasis, which are spread through human wastes, and it is apparent that an attack on these diseases is a major public health project. The health of women and children, the training of midwives, and establishment of health centres for women and children have been given special attention. The Patriotic Health Campaign has become an annual event in which the broad masses participate in dredging ditches, eliminating flies, digging new wells, and so on. With respect to nutrition it is said that the Chinese diet is sufficient in calories to sustain

manual labour, but the amount of protein is inadequate.

- 430 Hung, Yi.,** *Peking teams serving minority areas.* In Douglas-White, I., McLachlan, G., eds., *Health Services Prospects: an International Survey*, London, Lancet, 1973, 266-268. Engl.

Medical teams are being sent from Peking hospitals to work in rural areas for a one-year period. Overcoming many difficulties arising from the difficulty of transportation, the medical equipment in the rural areas, and poor facilities, the teams conduct medical examinations, organize and launch health campaigns, train barefoot doctors and peasant health workers.

- 431 Kao, Chung-shan.,** *Summing-up report at the 1965 Academic Conference on Chinese Traditional Medicine of Heilungkiang Province (excerpts).* Selections From China Mainland Magazines (Hong Kong), (596), 9 Oct 1967, 16-25. Engl.

At a conference on Chinese traditional medicine in 1965, it was suggested that more urban practitioners of Chinese medicine should be organized to go to the countryside, not only to treat peasants but also to help rural practitioners improve their techniques. The need to recruit more apprentices and health personnel to practice Chinese medicine in the countryside is stressed, since traditional methods are both economical and effective. Steps that must be taken in promoting practice of traditional medicine are discussed.

- 432 La Dany, L.,** *Public health.* China News Analysis (Hong Kong), (889), 4 Aug 1972, 1-7. Engl.

The author traces steps that have been taken in public health from 1969 to 1972 in the People's Republic of China, as revealed in the Chinese press. Comments reflect progress of the Patriotic Health Movement, rural health service, the cooperative medical service, barefoot doctors, and herbal medicine.

- 433 La Dany, L.,** *Medicine to the villages.* China News Analysis (Hong Kong), (602), 4 Mar 1966, 1-7. Engl.

In 1964 China's vice-minister for public health reported that every commune had a hospital or clinic, and that every production brigade and production team had a clinic or health station. In 1965 leading doctors from Peking were dispatched in roving teams to the villages, for the purpose of reorienting their political thinking,

and to help the rural population. The experiences of several doctors, as reported in Chinese mainland sources, are quoted.

- 434 Lampton, D.M.,** *Trends in health policy.* Current Scene: Developments in Mainland China (Hong Kong), 12(6), Jun 1974, 1-9. Engl.

By 1971, Mao's directives to reduce the years of schooling for medical personnel, and to put the stress for health work on the rural areas, led to reform of all aspects of China's medical system. However, according to a report by a former barefoot doctor, the stability of the cooperative health programme was in jeopardy particularly in north China where drought conditions have affected agricultural production since 1972. Since financing by communal health care is supposed to come from the local agricultural base, in bad years the funds available for rural health care decrease, and unless subsidies are provided by the county the commune facilities are forced to close down. Local cadre mismanagement has been an additional factor in the failure of rural medical facilities to meet the needs of the local population. A third difficulty has been that peasants often want a level of care that cannot be provided in the rural context by paramedics with the result that urban hospitals are being overburdened. As a consequence of these difficulties there has been a tendency for counties and provinces to directly subsidize commune health programmes, there has been substantial difficulty in universalizing the cooperative health programme, and recognition of the necessity for increasing the level of skill of the barefoot doctors. The Ministry of Public Health has witnessed a resurgence of the pre-Cultural Revolution leadership and a gradual reduction in the number of individuals associated with the People's Liberation Army. There is evidence of acknowledgement that professional excellence and medical research are to be promoted. Corroborating this view is the reappearance of the *Chinese Medical Journal* in 1973. Pressure for increased years of study in medical education is already having its effect; Chung Shan (Sun Yat-sen) Medical School in Canton recently announced that its curriculum has been lengthened by six months making the total length of schooling three and one-half years.

- 435 Li, Te-ch'uan.,** *Achievements in minority nationalities' health work.* Selections from China Mainland Magazines (Hong Kong), (451), 11 Jan 1965, 10-13. Engl.

In China's outlying areas some of the most serious diseases have been eliminated, brought under control, or greatly reduced. Health care for women and infants has been thoroughly developed, and midwives have been trained. Hospitals and sanatoria are three times as many as in 1949, with an increase of more than 30 times the number of health and technical personnel. Work has been actively carried out to maintain and develop the traditional medical knowledge of the various nationalities.

- 436 Ling, Yang.,** *Medical network in a mountain county (I),(II)*. Peking Review (Peking), (34), 24 Aug 1973, 17-21. Peking Review (Peking), (35),(36), 7 Sep 1973, 49-51. Engl.

The county hospital, commune health clinic, and cooperative medical service of Tsincheng County, north China, are described in detail. The hospital has a medical staff of 180 and full medical/surgical facilities. Medical teams frequently go out to treat patients in the countryside, and respond to telephone requests for help from the commune clinic. Doctors, nurses, and technicians for the communes and brigades are trained at the county hospital. Every commune has its own health clinic, which is steadily becoming the base of medical and health work in the village. In the people's communes there exists a cooperative medical system. There the peasants pay only a small part of medical expenses with the rest covered by the production brigade's collective welfare fund. The brigade health centre is staffed by barefoot doctors. Traditional Chinese medicines are relied on extensively.

- 437 Lung, Chiang-wen.,** *Better health for the peasants*. China Reconstructs (Peking), 19(10), Oct 1970, 28-31. Engl.

Service to the people is the fundamental orientation of the socialist system, and the core of China's health policies. Quick progress has been made in the northernmost province, Heilungkiang, where mass campaigns have been launched for hygiene, sanitation, and the elimination of contagious diseases. The province now has a health station for every production brigade, a clinic for every commune, and a hospital for every three or four communes. Most communes have adopted a cooperative medical service. Barefoot doctors are a new force in developing this cooperative service. Traditional Chinese

medicine has provided cheap and effective medicinal remedies and, working together, traditional practitioners and modern doctors are creating unique Chinese methods of treatment.

- 438 MacInnis, D.E.,** *Public health policy since the Cultural Revolution*. China Notes (New York), 9(4), Autumn 1971, 43-44. Engl.

Reorientation in public health policy in China dates from Mao's 1965 directive: "In medical and health work, put the stress on the rural areas." New programmes designed to level out the differences in medical services between urban and rural areas have resulted in massive transfer of medical and public health workers to rural areas and formation of rural medical care systems based on communes, financed and operated by the peasants. New grass-roots training programmes have sprung up in rural areas; numbers of trained barefoot doctors and part-time health workers have risen considerably. Admission policies in the "new-type medical colleges" favour children of peasant and worker families.

- 439 Nan, Shao.,** *Making the ancient storehouse of Chinese medicine serve the people*. China Reconstructs (Peking), 19(3), Mar 1970, 27-29. Engl.

The efforts of a medical worker to treat illness with Chinese herbs and to introduce this practice into the commune clinic are described. Local people's home remedies were gathered and studied, and ensuing experiments produced many new treatment possibilities.

- 440 Okawa, K.,** *(Medical care in farm villages and the economy movement)*. Hokenfu Zasshi (Japanese Journal for Public Health Nurses) (Tokyo), (28), Dec 1972, 898-901. Japanese.

In order to build a prosperous healthy socialist society when only scarce financial resources and little equipment are available, thrift is essential. This applies also to the social sector of public health. Therefore a campaign for thrift was started in the People's Republic of China with the purpose of ensuring better public welfare. When medical cooperative societies were first set up, there was often waste, carelessness, and mismanagement. Many difficulties and shortages resulted. People were then taught to keep the rules, to listen to the doctor, to request only that medicine that was necessary and the cheapest

available. People learned how to gather medicinal plants, even in inaccessible mountainous areas, and how to grow many of these plants. They even learned how to make medicines (in some places up to 50 different kinds) themselves. For saving on medical treatment expenses, more stress was put on preventive medicine. People were instructed in hygiene and taught how to prevent many diseases. The "barefoot doctors" (part-time country medical helpers) received better theoretical and practical training from qualified doctors. All these efforts contributed enormously to the reduction in costs of medical care (in some places by as much as 80 percent) in the People's Republic of China.

- 441 Okawa, K.,** *Hadashi no isha. (Barefoot doctors).* Hokenfu Zasshi (Japanese Journal for Public Health Nurses), (Tokyo), 28, Jan 1972, 44-47. Japanese.

This article describes the origins, the development, and the present situation of the "barefoot doctors" in China. The idea was born in 1958 in the Shanghai area. After an early development, the system faced a number of crises but is now well established. There were about one million barefoot doctors in China as of 1972. Their training is provided during the slack farming season, by touring medical teams from the army or urban hospitals. These barefoot doctors are chosen from the poorer strata of society and have generally a grade-school education. They can make diagnoses, prescribe a number of medicines, give a variety of treatments and perform simple operations. They can also direct more difficult cases to higher agencies. Since female medical workers do not give up their medical activities on marrying, the number of barefoot doctors increases continually and their ability improves equally. They are the pioneers of the medical system in the countryside. They helped immensely in the campaign for hygiene and cleanliness, and are an essential part of the country-wide organization of socialistic medicine.

- 442 Okawa, K.,** *Noson no kyodo iryo seido. (Cooperative medical system of the village).* Hokenfu Zasshi (Japanese Journal for Public Health Nurses), (Tokyo), 28, Apr 1972, 294-298. Japanese.

Since 1949, efforts were made in China to implement a unified health insurance and hygiene policy. The patriotic campaign for hygiene was launched in 1952. In 1965 the stress with respect to medical care and hygiene was placed on the countryside. Starting from the province of

Kuang-Tung cooperative medical systems were set up within the framework of agricultural production cooperatives. Three interwoven elements make up the structure of these local medical centers: the "barefoot doctors," the itinerant medical teams, and the cooperative medical system. These three constitute one organic unity. The village medical centre is closely linked with production. It is incorporated into a popular public corporation which it helps function well. The system went through a number of crises but it is now established in the whole country, even in the remotest areas. There is a consultation center and people can be treated locally. More serious cases are directed to more specialized and better equipped agencies. The article explains how these centers are financially supported by the various levels of the commune system.

- 443 Okawa, K.,** *Kaho to junkai iryotai. (Participation of medical personnel in labor forces and visiting medical teams).* Hokenfu Zasshi (Japanese Journal for Public Health Nurses), (Tokyo), 28, Feb 1972, 51-55. Japanese.

"Return to the bottom" has been a slogan and a movement in China since the late sixties. Within the framework of this movement, in order to prevent bureaucracy, power concentration, and the development of a petit bourgeois mentality among the managing staff of the medical system, doctors must go back to the village, the factory, or the mine and live with the workers. They should do this for one-third of their time. This helps destroy the barriers existing between cities and villages, industry and agriculture, between intellectuals and workers. Mobile medical teams have been formed, which, together with the barefoot doctors, constitute the pattern of medicine in the countryside. The purpose of having these itinerant teams is to help the peasants with their welfare as well as with their political and social education. Important experiments have been carried out already and plans are being made for organizing these itinerant teams on a national scale. The article describes experiments made in the Hunan and Hopei provinces in 1965. The first group (30 people) treated one million seriously ill people in four months time. A second group (26 members) toured forbidding mountainous areas. In two and one-half months time they walked 16 700 km, performed 448 operations, and made 15 000 medical examinations. Another most important itinerant medical body is made up by the People's Liberation Army. They are 208 teams who reach the most

inaccessible places. They train barefoot doctors, teach hygiene, build stables separated from houses, etc.

- 444 Pearson, S.,** *Peep behind the bamboo curtain: health services in China.* Nursing Times (London), 68(8), 24 Feb 1972, 243-244. Engl.

Visiting a commune hospital near Canton, this observer reports on the hospital, outpatient activity, the hospital pharmacy, and a barefoot doctor training programme. Students of this course are peasants who come from surrounding villages to study first aid, acupuncture, hygiene, immunization, and birth control. Between training they return to their own villages and their normal work, attending to health work when it is required. When the country doctors require more skilled help or patients require further treatment, advice is available by telephoning the nearest physician.

- 445 Peking Review, Peking.** *Medical service in People's communes.* Peking Review (Peking), (33), 18 Aug 1972, 21-22. Engl.

It is reported that in the Kwangsi Chuang Autonomous Region of south China each of the 1 004 people's communes has its own clinic and the number of medical and health workers is more than twice that of 1965. Most of the production brigades have set up a Cooperative Medical System and over 28 000 barefoot doctors have been trained. The health activities of the communes, such as conducting mass campaigns, are discussed.

- 446 Peking Review, Peking.** *More medicines and medical equipment for the villages.* Peking Review (Peking), (35), 1972, 20. Engl.

In response to Mao's directive that the stress in medical and health work be placed on the rural areas, Shanghai factories have increased their production of medicines and light equipment for the outlying districts. Investigation groups were sent out from the factories to find out firsthand what medicines and medical equipment were most necessary. The Shanghai pharmaceutical industry has made efforts to produce herbal medicines and combined Chinese-Western medicines. Prices of medicines have dropped sharply due to increased production rates and lower production costs.

- 447 Peking Review, Peking.** *Intellectuals will be welcomed by workers, peasants and soldiers: the story of rural doctor Huang Yu-*

hsiang. Peking Review (Peking), (41), 11 Oct 1968, 30-32, 34. Engl.

This article describes the experiences of a professional doctor as he learns to relate to the life style and needs of China's rural peasants.

- 448 Peking Review, Peking.** *Cooperative medical service greatly welcomed by poor and lower-middle peasants.* Peking Review (Peking), 12(3), 17 Jan 1969, 4-8. Engl.

The cooperative medical service of the Chunking Production Brigade, Kwangtung Province, started in 1957 when the peasants had formed an advanced agricultural producers' cooperative. From 1957 to 1964 the brigade paid for all its members treatment fees; the patient only paid the registration fee. From 1965 to 1969 the medical expenses were paid by the brigade, the team, and the members, each commune member paying about one yuan a year. The fund is jointly contributed to by all three at the time of the yearly income distribution. Under this service, members get treatment for minor ailments from the production team's health worker, and are treated for more serious maladies at the brigade's medical station. In economic terms, the service has promoted production and developed the collective economy. The experience of the Chunking brigade indicated that the following principles must be followed: 1) establish peasants, cadres, and medical personnel as leaders of health work, so that the system meets the needs of workers and peasants, 2) train barefoot doctors and health workers who are not divorced from production to form a stronger health network, 3) put preventive medical care first, 4) make use of traditional medicine to attain self-reliance.

- 449 Quijada Cerda, O.A.,** *El medico en China popular. (Physician in people's China).* In Quijada Cerda, O.A., *Medicina en China*, Santiago, Soc. Impresora "Horizonte" Limitada, 1962, 121-129. Span.
See also entry 324.

Attracted by the new order of things Chinese physicians share in the lives of farmers as part of their practice. No coercion has been needed to accomplish this. Physicians, during their work in the field, act as consultants in fields other than medicine; there is a certain competition among young medical graduates to determine who will leave a longer lasting personal imprint of his

presence among the peasants and labourers of the communes. The author makes certain comparisons between the motivation guiding the Western and the Chinese medical student or physician; he concludes that the latter are convinced that they are part of a unique experiment in the history of man.

- 450 Rifkin, S.B.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Health care for rural areas*. In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education, and Welfare, DHEW Publication No. (NIH) 73-67, 1973, 141-152. Engl.

In mainland China, having recognized the need to protect their largest resource, i.e. their manpower, health policies are an integral part of overall development planning. Development of health services has followed the various stages of economic development. In providing care for the rural workers in 1950, four basic health units were reconstituted: Epidemic Prevention Stations, affiliated clinics, Red Cross and Red Crescent Societies, and spare-time clinics. Mass campaigns for health purposes were called "Patriotic Health Campaigns," initiated to improve village water sanitation and to eradicate the four pests. The cornerstone, or rural health programmes, was a revived system of state-supported county hospitals and health centres. By 1957, most counties had at least one hospital. By 1958, with the formation of communes, responsibility was delegated to the rural health centre, which was responsible for outpatient work, direction of mass campaigns, contagious disease control, etc. Traditional doctors joined the national and municipal public health services. Senior medical doctors were placed in rural hospitals to direct the new health services and train local staff. At the same time, barefoot doctors were being trained and expanding medical manpower in the countryside. In the post-1965 era, medical personnel were sent to the countryside to become members of mobile medical teams, one of their tasks being the training of barefoot doctors. The People's Liberation Army has sent thousands of medical teams to the countryside, thus becoming a model for emulation for all medical and health work in rural areas. Thirty-six references are listed at the end of the paper.

- 451 Rifkin, S.B.,** *Doctors in the fields*. Far Eastern Economic Review (Hong Kong), 18 Mar 1972, 20-22. Engl.

China's unique health service, which has rejected the high standards of Western medical care in favour of meeting the needs of all the people, depends on thousands of medical auxiliaries. In response to Mao's appeal in 1965 for more medical work in rural areas, one-third of the total urban medical corps at any given time are serving in the countryside. These teams train medical aides, in particular the barefoot doctors, who spend the first four months of their training learning simple medical principles and treatment methods, then go to work in the fields, and later return for another four-month course, spending time in a modern hospital. This formal training lasts three years. Difficult cases are referred to the nearest clinic or mobile medical team. Barefoot doctors are supported by traditional medical assistants, nurses, midwives, laboratory technicians, and thousands of public health workers. The People's Liberation Army has sent thousands of health teams to the countryside, and a cooperative medical care scheme in the communes has developed. Inroads being made into the problems of rural health care have set an example for health planners and national policy makers in other countries where alternatives must be found for existing stagnant medical care.

- 452 Rifkin, S.B.,** *Proposal for the investigation of rural health services in China*. Brighton, University of Sussex, Science Policy Research Unit, nd. 4p. Engl.
Unpublished document.

Development strategy goals set by the People's Republic of China include: 1) closing of the urban-rural gap, 2) building of both industry and agriculture, 3) eliminating distinctions between manual and mental work, and 4) self-reliance. In this article (an expanded outline for research proposals) the rural health policies of China are considered as an example of the application of China's developmental theories to argue the following: that China should be classified as an important "developing country," and that Chinese strategies and tactics for development may be applicable to other developing nations. Research is proposed that will outline some major problems of creating adequate health services in developing countries, and to examine the People's Republic of China's approaches in solving these problems.

- 453 Sidel, V.W.,** *Barefoot doctors of the People's Republic of China.* The New England Journal of Medicine (Boston), 286(24), Jun 1972, 1292-1300. Engl.

See entry 544 for letter to the editor.

China's rural people, who comprise 80 percent of its population, have in the past been served by grossly inadequate numbers of health care personnel. Rural medical services were massively expanded as a result of the Great Proletarian Cultural Revolution, which began in 1965. As part of this expansion, agricultural workers are trained to meet rural needs for environmental sanitation, health education, immunization, first aid, and some aspects of primary care and post-illness follow-up; there are now said to be over a million such "barefoot doctors." Their formal training period is brief, and continued on-the-job education is stressed. Analogous health workers include "worker doctors" in China's factories and "Red Guard doctors" who are housewives serving as physicians' assistants in urban neighbourhood health stations. The development of these categories of workers and their training illustrate some of the principles on which current Chinese health services are based. (Journal abstract.)

- 454 Sidel, V.W., Sidel, R.,** *Health care in the countryside.* In Sidel, V.W., Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 76-98. Engl.

Efforts began in the late 1950's to train indigenous rural personnel who would participate in agricultural production and at the same time deliver health care. There are now said to be over one million of these "barefoot doctors." During slack agricultural periods, their time is spent on environmental control and preventive medicine for the production brigade. The barefoot doctor is considered a peasant who performs some medical duties, and his pay is that of an agricultural worker. Formal training ranges from three- or four-month periods in successive years, interspersed with on-the-job supervision and guidance, to a single three- to six-month period of training followed by a variable period of on-the-job supervised experience. The formal training is usually taken in a county or commune hospital. Duties include responsibility for environmental sanitation, health education, immunizations, first aid, and aspects of personal primary medical care and post-illness follow-up. The range of knowledge of the barefoot doctor is indicated in

the *Barefoot Doctor Handbook*, excerpts from which are shown in Sidel's book. At the brigade level, clinics vary widely, but in most, barefoot doctors are responsible for the health of brigade members. Commune hospitals and county hospitals are discussed with respect to staff, bed capacity, and maternal and child health. Medical fees vary widely in the communes, but are such that all peasants can afford health care.

- 455 Sidel, V.W.,** *Who helps the doctor? China's barefoot doctors.* Update International (New York), 1(6), Jun 1974, 425-429. Engl.

As a result of Mao's directive to go to the rural villages, and as a response to the Cultural Revolution itself, about one-third of China's urban doctors were at any given time assigned to the countryside. Some served with mobile medical teams while others were assigned to commune and county hospitals. Their most important duty was the training of barefoot doctors who would remain workers but spend part of their time performing medical and public health duties. Political ideology and a desire to serve the people are major considerations for selection of trainees. Formal training periods vary from three- or four-month periods in successive years, interspersed with in-service supervision, to a single three- to six-month period followed by a variable period of in-service supervision. Responsibilities include environmental sanitation, health education, immunizations, first aid, etc. The barefoot doctor's medical bag contains herbal medications as well as modern drugs and equipment.

- 456 Spencer, B.,** *Desert hospital in China.* London, Jarrolds Publishers (London), Ltd., 1954. 192p. Engl.

In the Kansu province of northwest China, a New Zealand doctor and his wife built a hospital with the help of the villagers in Sandan. Amongst their duties was the health care of school staff, pupils, and villagers in the isolated town, 3 000 miles from Shanghai. This experience took place in 1947-1949.

- 457** *Summary of World Broadcasts, Reading, England. Further provincial press comment on Mao's 1965 directive on rural health work.* Summary of World Broadcasts (Reading, England), 2 Jul 1969, pages FE/3114/BII/1-FE/3114/BII/7. Engl.

Chairman Mao's instruction "in medical and health work, put the stress on the rural areas" is being implemented by training barefoot doctors, placing leadership of health departments in the hands of Revolutionary Committees, and sending medical teams into rural areas from urban hospitals. Mao's directive has pointed out the basic direction for the revolution in medical and health work.

458 Toriyama, M., (*Barefoot doctors of China*). Japanese Journal of Nursing (Tokyo), 37(12), Dec 1973, 1580-1588. Japanese.

The author reports on his trip to China in 1972. There are two or three barefoot doctors for every 2 000 - 3 000 people living in rural communities or working in factories. These barefoot doctors work alongside those they care for, performing medical duties over and above their normal work routine. Barefoot doctors are between 20-30 years of age, both men and women. They first receive a few months of hospital training before they begin their medical duties and afterwards they take yearly refresher courses. Their tasks include the instruction of preventive hygiene and birth control both to the people in their work milieu and to those living in the surrounding area. Barefoot doctors also give acupuncture treatments, moxibustion treatments, and injections when needed. However, they refer problems too difficult for their capabilities to the hospital. The author observed that one of the salient points of the barefoot doctor concept is the fact that these medical personnel live with and see each day the people they have under their care, and they can readily perceive any changes in their health. Barefoot doctors are organized through health stations, which are in turn responsible to the hospital of the district. If the barefoot doctors are intelligent and energetic enough, with experience and training they can eventually go to a medical college to become medical doctors. Nurses in China receive more education and training than do the barefoot doctors. Nurses are qualified to give, without the advice of a physician, medical treatment to patients. In addition, after a certain number of years experience and after one year final training, nurses can become qualified medical doctors. The people are covered by a commune-level insurance plan that defrays most of the costs of medical care. Each commune has, as well, a rather well-equipped hospital, including both Eastern and Western medical equipment.

459 Wilenski, P.S., *Barefoot doctors and the rural health network*. Forthcoming in Medical Care Systems in Developing Countries and the Chinese Approach, Contemporary China Series, Contemporary China Center, Australian National University, Canberra, Australia. Engl.

Prior to the Great Leap Forward in 1958, China's approach to providing sufficient medical personnel followed rather conventional lines, i.e. the emphasis was on increasing the number of well-trained doctors. Yet the needs of the rural areas were still not being met. The Great Leap Forward, with its aid-agriculture campaigns, forced a change in policy; the first step was to shift the administrative centre of rural medical programmes from the county hospital to the communes. Schools were established in *hsien* hospitals and commune clinics to give short-term medical training to large numbers of health workers who would continue agricultural work and perform simple medical treatment on a part-time basis. Funds for the commune's medical programmes were organized under the collective medical care system, forerunner of the cooperative medical service. Some backsliding occurred from 1960, as the emphasis returned temporarily to medical science, the training of highly qualified personnel, and urban health centres. At the insistence of Mao Tse-tung in 1965 the Ministry of Public Health began sending more mobile medical teams to the villages in rotation, with the intention of having one-third of the urban personnel in the countryside at a time. At this time it was decided to continue training health workers for the production teams, and to provide doctors and other trained medical personnel such as barefoot doctors at the production brigade and commune levels. Mobile medical teams composed of doctors and technicians from urban hospitals treat serious illness at the commune clinic, train barefoot doctors, and circulate to remote areas of the commune. The barefoot doctor can be considered the lynch-pin of the rural health network, since he is the immediate source of medical attention in the village. Training programmes vary from area to area, and specific instruction is determined by local conditions. Over a two to three year period, they study full-time during the slack season and return to agricultural work during the busy months. The barefoot doctors are responsible for vaccination programmes, compiling medical histories, conducting health campaigns and sanitation work, and training health workers for the production team.

460 **Worth, R.M.,** *Institution building in the People's Republic of China: the rural health center.* East-West Center Review (Honolulu), 1(3), Feb 1965, 19-34. Engl.

In China prior to 1949, the physical environment was heavily polluted, parasitic diseases were universal, infectious diseases were highly prevalent, and infant and child mortality rates were extremely high. The first Chinese National Health Congress of 1950 stated four specific health policies: 1) to improve the health of peasants, workers, soldiers, 2) emphasize preventive medicine, 3) participate in mass health campaigns, and 4) join forces with traditional practitioners. By 1955 most serious health problems had been alleviated and the most logical step forward was to develop local health centres. Meanwhile the membership of the Chinese Medical Association included traditional practitioners and Western-style doctors who were studying traditional medicine part-time. In 1958 came the communes, the Great Leap Forward, and the concomitant health measures of: 1) intensifying campaigns against parasitic diseases, 2) building health centres in every commune and health station in each village, 3) rotation of urban health workers to rural areas, and 4) an effort to gather private home remedies to turn over to research institutions. At health centres, patients were free to choose between a Western doctor and a traditional practitioner, but the two doctors would consult with each other and treat each other as equals. There appears to be a pragmatic amalgamation of these two medical systems at the local level. Communication in this development scheme has involved radio, newspapers, meetings, plays, etc. all of which provide reinforcement of party policies at the local level. It will be of interest to see whether China's mass communication system can reduce the birth rate to counteract the dramatic fall in the death rate.

461 **Worth, R.M.,** *Strategy of change in the People's Republic of China: the rural health center.* In Schramm, W., Lerner, D., eds., *Communication and Change in the Developing Countries*, Honolulu, East-West Center Press, 1967, 216-230. Engl.

Pre-Liberation China suffered from intense overcrowding in cities and villages, universal pollution by human and animal wastes, an infant mortality rate in the one-to-five group of 30 percent, and a high prevalence of insect-borne, parasitic, and infectious diseases. One of Mao's first steps toward a national health policy was to call for the unity of all medical workers of traditional

and Western schools alike, and to emphasize disease prevention and mass health education. The next step was to develop local health centres for the 85 percent or so of the people in rural districts, and to restore traditional medicine to a place of prominence in the national scheme, thus allowing the Chinese people to retain pride in their heritage, and bridge the gap in identity between "old China" and "new China." Research institutes and schools of Chinese medicine were established and Western-style doctors given courses in traditional medicine. The rural health centre became an established institution in every commune, with smaller health stations in the villages. Here, as well as in city hospitals, a patient was free to choose which type of physician, traditional or modern, he wished to be treated by. There appears to be a real communication between and a pragmatic fusion of these two medical systems at the local level; the situation illustrates a successful effort in development, achieved through the overwhelming force of the Communist mass communication system.

462 **Yang, Lin-feng.,** *Medical care in the countryside.* In Douglas-White, I., McLachlan, G., eds., *Health Service Prospects: an International Survey*, London, Lancet, 1973, 264-266. Engl.

Tungssuyi Village, a production brigade of the Pakung People's Commune in Shansi Province, was a pioneer in China's cooperative medical service. Now the service covers most of the production brigades in rural communes throughout China. Large numbers of local youth have been trained as part-time medical workers to staff the clinics at the brigade level. These "barefoot doctors" give medical treatment and regular vaccinations, and promote public health. Medicinal herbs are grown by the staff and prescribed in addition to Western medicines. Drastic price reductions for medicines since 1969 have helped the rural medical service. Difficult cases are referred to the commune hospital, which has hospital bed space, X-ray equipment, and an operating room; this hospital gives technical guidance to all the brigade clinics in the commune. Cases may be referred in turn to the larger county hospital. In this particular county there are three times more medical workers available than in 1965. In 1972, 77.5 percent of the county governments' allocations for medical and health work and 63 percent of the medicine were for the rural areas.

463 Yi, Lien., *Peking medical teams tour rural areas*. Peking Review (Peking), (38), 22 Sep 1972, 12-15. Engl.

Peking hospitals sent their first team to work in the countryside of northwest China in 1967; as of 1972 some 6 000 medical workers had been sent to distant parts of the country. They went in rotation, generally for a period of 6 to 12

months. In the Chiuchuan region of Kansu Province, for instance, every county now has a hospital with health centres at the commune and production brigade levels. By helping local inhabitants improve their sanitary conditions, the health teams prevented disease. They trained 470 peasants to become barefoot doctors, health workers, and midwives during their travel in the countryside.

V.3 Health Care Organization and Planning - Urban

See also: 095, 173, 193, 195, 279, 341, 403

- 464 Aaron, H.,** *Notes on drugs and therapeutics in the People's Republic of China.* The Medical Letter (New Rochelle, N.Y.), 14(18), Sep 1972, 65-68. Engl.

In the People's Republic of China in 1972, the use of traditional and Western pharmaceuticals, therapeutic methods, and drug manufacturing practice was observed. The principle that unifies modern Chinese therapeutics is the belief in combining traditional with Western medicine. Chinese medical personnel believe that ancient herbal remedies have valuable properties in relieving symptoms and curing many disorders. Many are not convinced that controlled trials are necessary to establish the efficacy of these remedies; that it only remains to extract the active principles. Moxibustion is a favourite remedy for local pain, and acupuncture is widely used for relief or cure of many disorders. Acupuncture anaesthesia, although it has not been explained in scientific terms, is being used increasingly in surgical procedures and merits serious study by Western physicians. Pharmaceutical factories used quality-control methods to ensure conformity. China appears to be self-sufficient in production of Western-type drugs for treatment and prevention of common diseases.

- 465 American Consulate General, Hong Kong.** *Carry out ideological revolution, send doctors and medicine to workshops, integrate prevention with medical treatment, promote production.* Selections From China Mainland Magazines (Hong Kong), (595), 2 Oct 1967, 11-19. Engl.

Translated from Liang-ning I-hsueh (Lianoning Medicine), (2), 1 Feb 1966.

Workshop cadres of the Talien Textile Mill complained that the mill's hospital was not competent enough to give adequate medical care to its patients with the result that production was affected. Steps were taken in time by the mill's Party committee to tackle the problem and the wrong orientation of the hospital was corrected. The doctors were oriented to direct their attention to the grassroots level and the masses. Concrete methods adopted to revolutionize the hospital work are enumerated in the article. (Journal abstract.)

- 466 Chang, M.K.,** *Visit to the Peking Children's Hospital.* American Journal of Nursing (New York), 72(12), Dec 1972, 2219-2221. Engl.

Peking Children's Hospital has four main functions: treatment, preventive medicine, teaching of medical and nursing students and paramedical workers, and medical research. Both Western medicine and traditional Chinese medicine are practised. Eighty percent of the staff are female, and all female medical workers are allowed 56 days paid maternity leave, have infant day care provided at the hospital, and receive free medical care. Hospital costs for the patient are nominal. Surgical procedures using acupuncture anaesthesia, and the immunization programme, are notable features of this hospital's medical care.

- 467 Chen, Chung-wei.,** *Advances in rejoining severed limbs.* China Reconstructs (Peking), 20(2), Feb 1971, 35-37. Engl.

Since the first successful attachment of a severed hand in 1963, Chinese surgeons have made progress in this technique. A surgeon describes how, through dedication to the ideals of Mao Tse-tung, difficult cases have been tackled and solved.

- 468 Fox, T.F.,** *Medical care in China today.* American Journal of Public Health (New York), 50(6), Jun 1960, 28-35. Engl.

As of 1960 mainland China had about 370 000 practitioners of traditional medicine and about 75 000 doctors qualified in Western medicine. Organization of medical schools, medical research, preventive medicine and medical care was largely on the Russian model. Groups such as government employees, students, and industrial workers paid no medical fees but most patients still had to pay substantially for drugs or operations. Private practices were giving way to group practice clinics and municipal medical centres. The modern trained doctor in China, like his counterpart in Russia, saw fit to work as one of a group in which he filled a specialized role. Hospitals in the city districts were run by the people's council and the district health office; top-level hospitals doing specialized work were run

by a city, province, medical college, or the central government. The hospitals appeared to be insufficient for the demand. For implementing the disease prevention programme, the city has its health department with an epidemiological station. Community involvement in health was assured by elected members of the street committee. As a result of the nationwide health campaign against sparrows, rats, flies, and mosquitoes, by 1960 smallpox, plague, and kala-azar had been almost wiped out and there had been no cholera since 1949. Available statistics indicated drastic reductions in the general death rate and in infant mortality. Doctors in China appeared to be under increasing pressure to accept Party leadership in detail as well as in principle. Party policy was also taking traditional medicine very seriously, with the aim of producing a practitioner with a knowledge of traditional remedies and modern medicine. This is evidenced by the attention paid to traditional medicine in medical journals, by the establishment of institutes of traditional medicine in every province, and by inclusion of this subject in the education of Western-type physicians.

- 469 Geiger, H.J.,** *Pragmatic approach to medicine.* Medical World News (New York), 22(14), 1 Jun 1973, 22-28. Engl.

A Western physician observes the health care system of Kung Chiang New Workers Residential Area in the suburbs of Shanghai. Eleven front-line "lane health units" are supervised by the neighbourhood health centre and staffed by a variety of professionals and nonprofessionals, technicians, and "traditional doctors." The units and centre are in turn linked to the district health bureau, to the district hospital, and to a medical school teaching hospital. The lane health station is accessible to people within a few blocks and focusses on treatment of minor illness, on preventive medicine, and health education. Treatment by barefoot doctors centres on acupuncture and herbs. The health centre is the unit for basic medical care. This has a large outpatient service as well as laboratory, pharmacy, and department of prevention and health hygiene. Staff includes "middle doctors" (with three years education), nurses, nurse-midwives, etc. The centre supervises barefoot doctors in the lane units, and is helped in turn by specialty physicians from the district hospital. The barefoot doctors, originally trained as part-time health educators, first-aid dispensers, and hygienists, are given three months basic training with on-the-job experience, and one-month-a-year follow-up courses.

Special training programmes last as long as six months. In certain cases, particularly in rural areas, barefoot doctors (with special training) do much more. Now 1.3 million in number, they reflect an emphasis on performance, as opposed to credentials, on the practical rather than the theoretical, and a preference for expertise over elitism. Physician education has changed drastically in curriculum (now three years and emphasizing the practical), in selection methods (i.e. based on fellow workers' recommendations, expectation that the doctor will go back to work in his own area), and in the recruitment pool, with preference being given to children of urban factory workers, and peasants, women, and former barefoot doctors.

- 470 Ghilain, A.,** *Aperçu de la gynécologie et de l'obstétrique en République Populaire de Chine* (1965). (*Outline of gynecology and obstetrics in the PRC* (1965)). Bulletin de la Société Royale Belge de Gynécologie et Obstétrique (Bruxelles), 36, 1966, 83-98. Fren.

Comments on gynecology and obstetrics in China are based on observations of hospitals and communes and on conversations with Chinese physicians and health officials in 1965. Seventy percent of births in urban centres take place in hospital, the other 30 percent at home. Obstetric and prenatal care facilities were observed to be more than adequate, as well as the availability of trained hospital personnel. The family planning programme and methods of birth control in use are discussed.

- 471 Horn, J.S.,** *Hospitals in China.* Monthly Review (New York), Apr 1971, 12-30. Engl.

Also appears in Horn, J.S., *Away With All Pests: an English Surgeon in the People's Republic of China, 1954-1969*, New York, Monthly Review Press, 1969, chap. 6. See entry 273.

Aspects of the Chinese hospital system discussed here include physicians' and surgeons' responsibility to patients, and relationships between members of the hospital staff. Many lives and limbs have been saved, and knowledge and techniques widely disseminated by the nationwide cooperation of the Chinese medical services. Hospital administration is characterized by a pervading democratic approach to staff responsibilities, frequent meetings to discuss current problems in the light of Mao Tse-tung thought,

and periods of manual labour for all hospital workers.

- 472 Horn, J.S.,** *Scaling the peaks.* In Horn, J.S., *Away With All Pests: an English Surgeon in People's China 1954-1969*, New York, Monthly Review Press, 1969, 107-123. Engl.

The author describes three fields of endeavour in which Chinese medical scientists have "scaled the peaks of science." These fields are burn treatment, insulin synthesis, and attachment of severed limbs. In each case seemingly insurmountable difficulties were overcome with the help of widespread participation by medical and non-medical people, the implementation of innovative techniques, daring surgical procedures, etc. The factor common to all three fields is current political thinking; that is, 1) they relied on the thought of Mao Tse-tung, 2) they were the result of collective rather than competitive work, 3) medical workers, the masses of the people, and the authorities encouraged and supported each other, and 4) the moral qualities explicit in Mao Tse-tung thought played an important role in ensuring success.

- 473 Horn, J.S.,** *Quantity and quality in surgery.* Arts and Sciences in China (London), 1(4), Oct-Dec 1963, 20-22. Engl.

China's experience shows that in the development of medical services, quality must not necessarily suffer at the expense of quantity in medical care. With the intense efforts of a large medical team, the life of a near-fatally burned steel worker was saved in 1958. This superhuman effort set an example for other medical personnel, and treatment of burns came to occupy a central position in surgery. The quality of treatment improved thereafter at an astonishing rate. In 1963, when a worker's severed hand was successfully attached, medical centres throughout China studied the case and took steps to ensure their own success if a similar situation arose. When the exceptional becomes the commonplace, quality is upgraded. The Surgical Congress is another method of upgrading quality. These meetings are of tremendous value in that they 1) put workers in related fields in touch with each other, 2) provide a broad picture of the levels reached throughout the country, 3) reveal obstacles to further progress, and 4) inspire delegates to greater efforts in the medical field.

- 474 Jain, K.K.,** *Glimpses of neurosurgery in People's Republic of China.* International

Surgery (Chicago), 57(2), Feb 1972, 155-157. Engl.

Following a visit to China in 1971, a Canadian physician records observations of neurosurgery. Acupuncture anaesthesia, which has been developed as an alternative to general anaesthesia, was observed by the author at Huashan Hospital, Shanghai, the Medical Institute, Nanking, and the Bethune International Peace Hospital, Hupei Province. The overall medical profession was impressive and the use of acupuncture appeared to be a useful innovation in neurosurgery.

- 475 Kallgren, J.,** *Social welfare and China's industrial workers.* In Barrett, A. D., ed. *Communist Chinese Politics in Action*, Seattle, Wash., University of Washington, 1969, 540-573. Engl.

Communist states within the respective limits of their economic potential are, or try to be, welfare states. Although the Communist world is primarily interested in rapid industrialization and a strong national defense — pursuits that require heavy investment yielding no (or no immediate) return to the customer — and although the level of economic development with which most Communist states were forced to start is relatively low, the ruling parties at least try to put a floor under the general living standard through social service schemes, free medical care, and various other public services. (Author abstract.)

- 476 Katz, A.M.,** *Letters from China.* Harvard Medical Alumni Bulletin (Cambridge, Mass.), (48), Nov/Dec 1973, 6-11. Engl.

A visitor to China records his impressions of hospitals, medical education, pharmacies, the standard of living and health conditions in general, in the year 1956. Reports centre mainly on the three largest cities — Shanghai, Peking, and Canton.

- 477 Malt, R.A., McDowell, R.,** *Cable from Cathay.* New England Journal of Medicine (Boston), 288(25), 21 Jun 1973, 1353-1354. Engl.

See also entry 348.

A delegation of American surgeons in China observed reimplantation of limbs and fingers, systematic treatment of enormous burns, and pervasive application of elementary care and preventive medicine by auxiliary personnel.

- 478 Morris, G.E.,** *Chinese hospitals.* Eastern Horizon (Hong Kong), 4, Apr 1967, 31-33. Engl.

An Australian physician reports on aspects of health and medicine in China. His impressions of the six hospitals visited were favourable.

- 479 Okawa, K.,** *Chukoku no toshi ni okeru iryo. (Medicine in Chinese cities).* Hokenfu Zasshi (Japanese Journal for Public Health Nurses), (Tokyo), 28, May 1972, 376-380. Japanese.

Before Liberation there were only 20 000 doctors trained abroad and established in big cities. There was no medicine in the country nor for the poor. By 1964, however, there were 170 schools of medicine, 80 schools of pharmacology, 110 000 doctors, and 1 400 000 medical helpers. In the cities there are large, medium-size, and small medical institutions where Chinese medicine is also practiced. They constitute one organic system and are distributed according to the population distribution. At the bottom there is the local clinic. They have staffs from five or six to 50 or 60 people, depending on the size. Not only do they treat sick people but they also carry out preventive programmes. Also they conduct educational programmes that vary according to the season's needs. There are 800 clinics of this kind in Peking. There is no competition between them; they work together with the major hospitals and receive help and guidance in return. Many different illnesses can be treated in one and the same clinic. The article explains who can be treated there and how the clinics get their financial support. The article turns finally to the "red medical squads." These are workers who received an essentially practical training and help their coworkers in the factory medical centers. These medical assistants remain workers. The progress of their ability is amazing and they even perform simple operations. So the factories can medically take care of themselves. Of course the hospitals bring their cooperation when needed. The Labor Health Care Insurance of China is a nationwide organization to which people belong through their link with their own corporation. The article looks into the financial aspect of the system.

- 480 Peking Review, Peking.** *From "hospital for overlords" to hospital of the labouring people.* Peking Review (Peking), 14(5), 29 Jan 1971, 14-16. Engl.

Fundamental changes in the political orientation of the Peking Fanhsiu (Anti-Revisionist) Hospital are described. Pointing out that prior to the Cultural Revolution most things in the hospital were copied from abroad, the author notes that

the hospital staff, guided by Mao Tse-tung thought, have shifted their stand to service for the people. Teams have been organized to give mobile service and some groups have settled in the countryside. Examples of cases requiring great dedication and cooperative medical teamwork, both in the hospital and in mobile teams, are quoted to show how tremendous changes have taken place in the mental outlook of staff members.

- 481 Peking Review, Peking.** *Mao Tse-tung's thought directs us in battle - how we removed a 45 kg. tumour.* Peking Review (Peking), 11(33), 16 Aug 1968, 21-25. Engl.

Successful removal of a 45-kg tumour by Chinese surgeons is credited to the strength and determination of Mao Tse-tung thought applied with scientific medical skill.

- 482 Peking Review, Peking.** *It is fine to have working-class leadership in the hospitals.* Peking Review (Peking), 12(7), 14 Feb 1969, 8-10. Engl.

The story is related of how medical personnel at Shanghai's Hsinhua Hospital saved the life of a man suffering from electric shock. Prompted to do all in their power by the sayings of Chairman Mao, the medical team demonstrated a "victory for the working class in leading the struggle-criticism-transformation — in the hospitals."

- 483 Peking Review, Peking.** *Health campaign in major cities.* Peking Review (Peking), (29), 21 Jul 1972, 23. Engl.

Campaigns for better sanitation, centering around elimination of pests and diseases, are organized regularly in the People's Republic of China. The summer campaign of 1972 is reported to have had good results. Beginning in mid-June, large numbers of cadres, medical workers, and students in Peking were being sent to workshops, fields and residential areas to pass on knowledge about disease prevention. People were mobilized to sweep streets, dredge sewers, and improve general sanitation in both urban and rural areas.

- 484 Peking Review, Peking.** *Hospital doctors go to factories.* Peking Review (Peking), (46), 17 Nov 1972, 23. Engl.

Since the summer of 1970, the Hotung Hospital in Tientsin has sent its doctors to the factories one day each week. Here the doctors treat workers, carry out preventive work, and teach factory

medical workers how to diagnose common diseases.

485 Raper, T., *China's national health.* China Now (London), 10, Mar 1971, 5-7. Engl.

During a tour of China, the author observed a large hospital in Tientsin that served six streets in the area (a total population of 42 000) and maintained a separate clinic in each street. The Revolutionary Committee pointed out that in medicine's new orientation toward combining Western and Chinese medicine, many medical workers have been sent from hospitals such as this to rural areas both "to serve the people" and to "learn from the workers and peasants." At a school for deaf and dumb children in Peking, it was learned that in 1968, a People's Liberation Army team had treated children using acupuncture with some hearing recovery in 90 percent of cases treated. Children were observed in class, where each was given a daily acupuncture treatment. Other schools, institutions, factories, and communes visited had their own clinics. The emphasis on traditional remedies was noticed everywhere; as a result of the Cultural Revolution, stress has been put on research into the use of those remedies and the integration of Western and Chinese traditional medicine. Interesting equipment on display in a Shanghai industrial exhibition included a portable X-ray machine and operating table, a large research electron microscope, and a glass model of the human figure, showing points suitable for acupuncture. The Chinese appear to be making great progress in medicine and medical technology.

486 Ratnavale, D.N., *Psychiatry in Shanghai, China: observations in 1973.* American Journal of Psychiatry (Hanover, N.H.), 130(10), Oct 1973, 1082-1087. Engl.

At the invitation of the Chinese Ministry of Health, the author visited China earlier this year. He describes the structure and organization of the Shanghai Psychiatric Institute, a therapeutic community in which the staff and patients work together in classless social organization, which is part of a medical system that blends the modern and the ancient traditional, medical practices. The author presents brief general information on acupuncture and describes its use in psychiatry, but stresses the preeminence of group activities in the therapy of mental illness. (Journal abstract.)

487 Reyes, V.A., *Brief glimpse of medicine in the People's Republic of China.* Journal of

the Philippine Medical Association (Quezon City), 43(5), June 1967, 385-398. Engl.

Following a visit in 1966 to Peking, Shanghai, Hangchow, and Canton, the author records details of hospitals and research institutes visited noting that 1) medical work is service-oriented, 2) medical needs of the people are met quite adequately, 3) most medical equipment and instruments are manufactured within China, and 4) all medical personnel encountered were knowledgeable on most of the current information in their fields of interest.

488 Sidel, R., *Role of revolutionary optimism in the treatment of mental illness in the People's Republic of China.* American Journal of Orthopsychiatry (New York), 43(5), Oct 1973, 732-736. Engl.

It is impossible to estimate the number of psychiatric patients currently under treatment in China. At the neighbourhood level, interpersonal disputes and minor diseases are handled by Red Medical Workers. Patients with neurotic disturbances are treated at the district level in hospital clinics and psychiatric prevention stations. The main goal of psychiatric treatment is to enable the patient to return to his family and work as quickly as possible. The patient's active participation is thought to be essential in the treatment of the illness. Mental illness is analyzed using the concepts Mao developed in his "paper tiger" theory. Several aspects of Chinese life are made explicit in the concept of revolutionary optimism: 1) the belief in subordinating the feelings of the individual to the needs of the group, 2) the belief that the individual is part of the revolution, 3) the belief that participation in the revolution gives meaning to life, 4) the belief in the infinite capacity of man to learn and understand.

489 Sidel, V.W., *Health workers of the Fengsheng neighborhood of Peking.* American Journal of Orthopsychiatry (New York), 43(5), Oct 1973, 737-743. Engl.

Within the Fengsheng neighbourhood of Peking, people are grouped into residents' committees (also called "lane committees"), which provide a health station and other social services. Health workers at this level are local housewives called Red Medical Workers; they are trained to record medical histories and to perform simple physical examination techniques. They have some knowledge of Western and herb medicines and of preventive medicine. A large part of their work is related to neighbourhood sanitation. The

Public Health Department supervises Red Medical Workers in providing immunizations. Birth control information and contraceptives are provided at the clinic. In the factories of the neighbourhood, there are health stations presided over by worker doctors, whose tasks are primarily preventive and educational. Backing up the residents' committee and the factory health station is the Neighbourhood Hospital, which in the case of Fengsheng has seven departments but no bed-space; patients requiring hospitalization are sent to the district hospital. The staff includes doctors of both traditional and scientific medicine, nurses, and technicians. The most impressive aspect of health work in the neighbourhood is its integration with neighbourhood life. The author lists elements of this system that might be transferable: 1) recruitment of health workers from among those who might otherwise waste valuable talents, 2) recruitment of health workers from community members, 3) short periods of training adequate for the skills required by the job, 4) minimization of the social distance between primary care health workers and those they serve, 5) attempts to spread medical knowledge widely, 6) structured referral patterns, 7) decentralized services, 8) self-reliance, and 9) altruism.

- 490 Sidel, V.W., Sidel, R.,** *Health care in the cities.* In Sidel, V.W., Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 40-75. Engl.

The cities of China are governed by revolutionary committees; their health services are coordinated by the local bureau of public health. Cities are subdivided into districts, neighbourhoods, and lanes (or blocks). Health care in the lane and neighbourhood is administered by a committee of those living in the lane, and provides a health station and other social services. The health stations are manned by Red Medical Workers, local housewives who are given rudimentary training so that they can do preventive health work and treat some minor illnesses. These workers are supervised by the Department of Public Health of the neighbourhood hospital, and a large part of their work relates to sanitation in the neighbourhood, provision of birth control information, and distribution of contraceptives. The neighbourhood hospital is staffed by a wide spectrum of health workers, with up to thirty physicians, both traditional and modern. Although equipment is scarce and primitive, it is

adequate for the level of health care performed. Health workers in the lanes and neighbourhoods play an important role in immunization, its informing people of its necessity and maintaining records, and in the family planning programme. Urban hospitals range from technologically sophisticated research and teaching hospitals to small neighbourhood outpatient centres. A wide variety of hospitals are described. In urban factories, worker doctors perform functions similar to the Red Medical Worker. Examples of several factories are noted. Scales of payment for health care vary from total subsidization by the patient's factory to payment by the patient for individual services, although costs are so low as to make health care available to all.

- 491 Sidel, V.W., Sidel, R.,** *Health administration and research.* In Sidel, V.W., Sidel, R., *Serve the People: Observations on Medicine in the People's Republic of China*, New York, Josiah Macy, Jr. Foundation, 1973, 175-190. Engl.

In China's health administration, the Bureau of Public Health in cities like Peking and Shanghai includes education, publications, motion pictures, athletics, civil affairs, labour, public safety, agriculture, etc. A brief discussion of the China Medical Association, the journal *China's Medicine*, and research programmes at various institutes is included.

- 492 Taipale, V., Taipale, I.,** *Chinese psychiatry: a visit to a Chinese mental hospital.* Archives of General Psychiatry (Chicago), 29, Sep 1973, 313-316. Engl.

The historical and ideological changes in Chinese psychiatry and their mental health organization as it is today, 1973, after the Cultural Revolution, are examined. According to some epidemiological studies the mortality in schizophrenia seems to be quite low in China in comparison to the West. We emphasize the relationships of sickness and society and societal reactions toward mentally ill people. In China, the need for hospital beds for the mentally ill seems to be very low. Treatment consists of psychopharmacological and various group therapeutic techniques with political texts and, now, acupuncture as well. The organization of patients themselves in groups is of import. The therapeutic processes are directed to the conscious levels of personality. (Journal abstract.)

- 493 van der Ghinst, M., Fabek, P.,** *Delegation medicale belge en Chine.* (Belgian medical

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delegation in China). Acta Chirurgica Belgica (Brussels), 64(9), Dec 1965, 1135-1150. Fren.

Belgian physicians, observing surgical practices in China, were impressed by orthopaedic techniques and by the progress that has been made in reimplantation surgery.

- 494 Wallace, J.D.,** *Personnel interchange should be two-way benefit*. Canadian Medical Association Journal (Toronto), 109(2), 21 Jul 1973, 138. Engl.

Having visited China as a medical observer, a Canadian doctor relates aspects of mental health institutions, the highly respected position of Norman Bethune, and the potentials of acupuncture analgesia. He points out that although China is considered an "emerging" nation, technical knowledge is complete and current, and medical and surgical procedures are of a high standard. An open and constructive interchange between China and Canada could bring considerable health benefits to both.

- 495 Wen, Hwa.,** *Chinese surgeons break another world barrier*. Acta Medica Philippina (Manila), 3(3), Jan-Mar 1967, 221-222. Engl.

A Chinese report describes advances in surgical techniques that have provided a breakthrough in the attachment of severed limbs. Operations of this nature have been successfully performed at Chung Shan Hospital, No. 6 People's Hospital, Shanghai, at the Shanghai Research Institute of Traumatology, and others.

- 496 Yang, Ho.,** *Key to success in surgical operation*. China Reconstructs (Peking), 17, Mar 1968, 32-34. Engl.

An army surgeon describes how Mao Tse-tung thought guided a surgical team in saving the life of a girl whose case had been declared hopeless by a specialist. His conclusion is that the key to curing disease is not excellent facilities and superb skill, but willingness to serve the people.

VI Family Planning/Maternal and Child Health Related Studies

See also: 037, 039, 040, 041, 181, 470

- 497 Aird, J.S.,** *Population policy and demographic prospects in the People's Republic of China.* In *People's Republic of China: an Economic Assessment*, Washington, D.C., U.S. Government Printing Office, 1972, 220-331. Engl.

This report contains 551 footnotes to both Chinese and Western literature.

When the Communist party assumed power in China in 1949, and until 1954, the official government policy on population was one of optimism. Attitudes changed with increasing concern for the population problem and the first family limitation campaign took place from 1954 to 1958. Propaganda was widely used to communicate the birth control message, primarily through the press. Fervor for the population movement ceased during the Great Leap Forward, but the second campaign began in 1962 and carried on until 1966. This campaign related planned childbirth to the health of mothers and children, to opportunities for work, study, and political progress of parents, and to the economic welfare of family and state. The interest of the Party and the State in late marriage and birth control was made even more explicit in the second campaign than in the first. Meetings, conferences, forums, and exhibitions were combined with more intensive propaganda and education in an effort to overcome existing opposition to birth control and late marriage. Methods of contraception advocated included the condom, diaphragm, intrauterine devices, rhythm method, and prolonged breast-feeding. Abortion received less attention in this second campaign, while sterilization and late marriage were stressed. It is not likely that the urban birth rates were much affected, and the impact on rural birth rates is likely to have been extremely slight. Following an interruption during the Cultural Revolution, birth control resumed in full force with the Third Campaign, 1969 to the present. Indications are that the campaign has unequivocal support at the highest level. Now included in contraception are oral contraceptives. Four model populations are

constructed for the period 1970-1990. Considering both the experiences of the three birth control campaigns and the implications of the population models, no great changes in China's demographic prospects in the immediate future can be expected.

- 498 Bialestock, D.,** *Child care: China, 1972.* *Medical Journal of Australia* (Sydney), 2, 24 Nov 1973, 979-980. Engl.

A group of 19 doctors spent 31 days in China as guests of the Chinese Medical Association. Medical care of children was observed in communes, day-care centres, kindergartens, schools, and hospitals. The accent in medical care is on provision of services to rural areas and on preventive medicine. Chinese women are helped by the community to fulfill the roles of wife, mother, and worker. Breast-feeding is carried on for about 12 months, nursing mothers being allowed two breaks in the working day. There is a 56-day paid pregnancy leave. The improvement in the status of women has resulted in improved health care for children. Children are being taught that the collective is more important than the individual, and that cooperation is more important than competition. (Journal abstract.)

- 499 Chang, C.C., Chang, S.H.,** *Child health in China.* *American Journal of Diseases of Children* (Chicago), 127, Jan 1974, 13-14. Engl.

The children of China on the average are much better nourished than ever before. Trained personnel take charge of children from infancy to school age at day-care centres, and mothers can take time from work to visit and breast-feed young infants. In the city, almost all babies are delivered in the hospital; however, in rural areas the births are still attended by midwives or paramedical personnel. Routine immunizations against whooping cough, diphtheria, poliomyelitis, and measles are administered the same as in the West. Some success has been reported in the treatment of deaf children using acupuncture therapy. Personnel responsible for hospital care of children are adequately trained.

- 500 Chen, Pi-chao.,** *China's population program at the grass-roots level.* *Studies in Family Planning* (New York), 4(8), Aug 1973, 219-227. Engl.

Also appears in Brown, H., Sweezy, A., Holdren, J., and West, B., eds., *Population:*

Perspective, 1972, San Francisco, Freeman Cooper, & Co., 1973.

First-hand observations of China's planned birth programme in urban and rural areas are related. Planned birth materials from five training texts for health personnel are summarized in an appendix.

- 501 Chen, Pi-chao.,** *Politics of population in Communist China: a case study of birth control policy, 1949-1965.* Princeton, N.J., Princeton University, 1966. 322p. Engl. Dissertation presented to the Department of Politics, Princeton University in candidacy for the degree of Doctor of Philosophy, Sept. 1966.

This paper traces the evolution of birth control policy in Communist China, explains this evolution through an analysis of the decision-making process in Peking, and explores the way in which the Chinese conduct a mass campaign to promote birth control.

- 502 Chen, Pi-chao.,** *China's birth control action programme, 1956-1964.* Population Studies (London), 24(2), Jul 1970, 141-158. Engl.

Chinese leaders are aiming for a natural growth rate of less than one percent before 2 000 A.D. Measures taken to reduce fertility and the organization of birth control in China are discussed. The Ministry of Health was assigned the task of implementing birth control policy, with each province setting up its own committee, the hsien (county) health bureau implementing the action programme, and at the commune level, women pioneers and part-time health workers bringing the birth control message to the peasants. The government mobilized the mass media to overcome popular resistance to birth control. This included press, radio, cinema, and exhibitions. Locally prestigious persons and doctors contributed articles and expressed opinions on the harmful effects of early marriage and the virtues of planned childbearing. A face-to-face approach has been adopted by the government involving part-time health workers, the Cultural Workers Corps, and the public school system. Condoms are the most popular contraceptive, with foam tablets, diaphragms, and jellies manufactured as well. The use of intrauterine devices has apparently gained popularity. An Indian formula for oral contraceptive pills was introduced in 1956. In 1957 the Ministry of Health permitted induced abortion without restriction, despite great protest from the medical profession, and

since 1962, great stress has been laid on vasectomy. To enhance fertility control, the party recommends an "optimal marriage age of 30 for men and 22 for women." The author deals at length with the party strategy — *tien hsien man hou* (start with a point and then extend outwards). This was achieved as follows: 1) efforts began in metropolitan areas, moving to smaller urban centres and then the rural areas; 2) efforts began with the educated section of the population and extended to uneducated ones later; 3) experiences gained in pilot projects were applied to larger areas.

- 503 Chin, Yueh-ying.,** *Country midwife.* China Reconstructs (Peking), 8, May 1959, 22-24. Engl.

A villager tells how she became a trained midwife and brought modern delivery care to the women in the neighbourhood. The opening of a maternity home adjoining the commune health centre is described.

- 504 Christiansen, E.M.,** *In a Chinese hospital.* Eastern Horizon (Hong Kong), 12(1), 1973, 45-49, 65. Engl.

Visiting a Chinese hospital for gynecology and obstetrics, this Western observer noted that 98 percent of the hospital staff were women, and in addition to on-the-spot treatment, the hospital sent medical teams to the country, to factories, and to neighbourhood groups. During a brief stay in a general hospital the author experienced being part of the medical team, working cooperatively toward good health.

- 505 Djerassi, C.,** *Steroid contraceptives in the People's Republic of China.* New England Journal of Medicine (Boston), 289(10), 6 Sep 1973, 533-535. Engl.

Reports on population policy and contraception in the People's Republic have been sporadic since the Cultural Revolution. The author presents his personal observations on chemical contraceptives. It is apparent that present chemical competence in the steroid and prostaglandin fields is roughly comparable to that existing in North America. Just as remarkable as the high level of chemical activity and the relatively early date of Chinese work with oral contraceptives is the volume of manufacture. Quality control is fairly primitive but falls within acceptable limits. A new development is the "paper formulation" or "sheet type oral birth control pill." Propaganda on family planning is ubiquitous and the desirability of limiting a family to two children is

emphasized. Information on contraceptive practice is limited to married couples. Since the People's Republic of China has more women on oral contraceptive therapy than any other country, Chinese contributions in epidemiologic studies can be of global impact and oral contraceptives can be used as a typical illustration.

- 506 Djerassi, C.,** *Observations on current fertility control in China.* China Quarterly (London), (57), Jan-Mar 1974, 40-59. Engl.

For a more extensive version of this paper, including many technical details not included here, see entry 507.

The use of intrauterine devices in China appears to be dropping drastically in favour of oral contraceptives, abortions seem to be decreasing with the major effort being placed on prevention, and sterilization is being recommended for parents of two or more children. Oral contraceptives are available in every commune, residential lane, or factory dispensary. The history of steroid contraceptive developments in China, current usage of contraceptives, research in fertility control, and population statistics are briefly discussed.

- 507 Djerassi, C.,** *Fertility limitation through contraceptive steroids in the People's Republic of China.* Studies in Family Planning (New York), 5(1), Jan 1974, 13-30. Engl.

Increasing emphasis is being placed on oral contraceptives and sterilization in the People's Republic of China. All contraceptives are produced within the country. Of particular note are the exceptionally low daily doses of progestin and estrogen in oral pills and a new formulation prepared by depositing the drug on water-soluble paper. Contraceptive devices are available in pharmacies for a modest fee, but oral contraceptives are dispensed free of charge through hospitals, commune dispensaries, lane committees, etc. Promotion of family planning is evident in all areas although information on contraception is available only to married people. Delayed marriages are recommended. Detailed descriptions are provided by the author for the nature of chemical contraceptives, i.e. composition and reactions, instructions for use, and dosage. Other topics discussed include current use of contraceptives (statistical data), current research in fertility control, population statistics, and prospects for collaboration with the People's Republic.

- 508 Draper, W.H.,** *World plan of action: is China already setting the pace?* Washington, D.C., Population Crisis Committee, n.d. 12p. Engl.

Unpublished document.

Before considering the recent experience of China in dealing with its population growth, the dimensions of the world problem are first examined. China's family planning programme is an integral part of the health service. The national and family goal has been set at two children per family, thus reaching zero population growth within a generation. Large urban centres are down to a one percent growth rate; rural areas are still above the two percent growth level, but declining slowly. Methods involved in China's programme include 1) propaganda, education, and leadership, 2) availability of birth control methods, 3) free distribution of the pill, 4) free sterilization operations, 5) abortion on demand, 6) availability of some form of health service to all the people. The author believes China's success has a lesson for the rest of the world, with regard to slowing population growth.

- 509 Draper, W.H.,** *Population and family planning programme of the People's Republic of China: testimony before Senate Sub-Committee on Health, May 4 1973.* Washington, D.C., Population Crisis Committee, May 1973. 9p. Engl.

Unpublished document. For abstract, see entry 508.

- 510 Draper, W.H.,** *China's family planning: 'stunning'.* Medical World News (New York), 12, 18 May 1973, 1p. Engl.

One Western observer's opinion that China is well on the way to defusing its population explosion is backed up by data obtained in Shanghai, where a zero growth rate has been achieved. A similar trend is apparent in Peking, Nanking, and Canton. He feels that American demographers tend to underestimate the long-term effects of China's mass family planning programme and suggests that once city growth rates are reached in rural areas, the goal of one percent national growth rate may be achieved by the year 2 000. To convince the rural population of the logic of birth control measures, the government uses all mass media, holds rallies, and sends family planning "activists" into homes. Most effective family planning is carried out in health centres and hospitals. Free birth control services, including distribution of the pill and intrauterine devices, and availability of abortion

on demand are an important factor in the programme's success. This observer concludes that China's results in family planning are remarkable, compare favourably with advanced countries, and surpass those in other developing nations.

- 511 Ellis, E.O.,** *Status of women in China: maternal and child care.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 24-26. Engl.

On visiting China in 1972, it was observed that women have equal work opportunity. For example, about half of the recently trained physicians are women. Some jobs tend to be done more by women (e.g. nursing, caring for and teaching young children); some by men (e.g. The People's Liberation Army). Improved nutritional status and prenatal health of young women has tremendously reduced complications during pregnancy. Recommended ages for marriage are 28 for men and 26 for women. Family planning, prenatal care programmes, and widespread education programmes are aimed at giving children a good start in life. Family planning information and materials, abortion, and sterilization are available without cost. Minority groups are the only people encouraged to have more than two children per family. Trained midwives are particularly important in rural areas; more than 2 000 000 have been retrained since 1966. Women are allowed two and one-half to three months normal pregnancy leave with pay in a salaried job, and without pay in the countryside. Children are provided with adequate nutrition, health services, education, recreation, cultural training, etc. A wide spectrum of health care facilities has been developed at all levels. Infant day-care is planned so that mothers may breast-feed and play with their children during rest periods. Some parents in cities leave their children at the centre day and night during the work week. The health network provides continuing care in day-care centres, classroom, fields, and factories. Health education of parents and other adults, at work and in other settings, plays an important part in the health programme.

- 512 Faundes, A., Luukkainen, T.,** *Health and family planning services in the Chinese People's Republic.* Studies in Family Planning (New York), 3(7), Supplement, Jul 1972, 165-176. Engl.

In China, there is a lack of national and provincial demographic and health data; however, detailed comprehensive data is maintained by

municipalities, communes, hospitals, factories, and so on. Rural production areas are divided into communes, production brigades, and production teams. Each production team has a health station, each brigade a health centre, and each commune a small hospital. The health station has two barefoot doctors, while the brigade health centre is run by barefoot doctors alone or with other health professionals. These primary health centres function as outpatient clinics only, providing general medical care and preventive medicine. The communal hospital has both outpatient clinics and beds for hospitalization. In factories and neighbourhood units, hospitals resembling commune hospitals are maintained. Large specialized hospitals, such as the university hospitals or the district hospital, offer the most sophisticated medical care, as well as performing teaching and research activities. Health workers, in order of number of years of training, are doctors, assistant physicians, nurses, midwives, technicians, and barefoot doctors. Since the Cultural Revolution, the education system stresses learning through practice. After 10 years of basic education and two years of military service or productive labour, professional studies can begin. An experiment to train physicians in three years as opposed to six is in progress. Training for nurses, midwives, assistant physicians, and technicians involves two years specialty training after eight years basic education. Barefoot doctors have varying educational backgrounds and are trained for only six months. Their function is primarily preventive but they also treat common illnesses, and deliver family planning services. There is a very high level of prenatal care, and complications of pregnancy occur very infrequently. This has been achieved by training local women for one month in basic gynecology and obstetrics, and by giving a similar course to female barefoot doctors. Family planning is considered to be an aspect of maternal health; thus prenatal examinations and family planning consultations are carried out simultaneously. Delivery of family planning services seems to be more successful in the cities where there are more family planning workers, and contraceptives are more widely accepted. Family planning is achieved by the use of four methods of fertility control: late marriage, abortions, use of contraceptives, and sterilizations.

- 513 Fessler, L.,** American Universities Field Staff, Hanover, N.H. *Delayed marriage and planned birth: translation of a Chinese birth control manual.* Fieldstaff Reports,

East Asia Series, China, (Hanover, N.H.), 20(1), Jan 1973, 1-15. Engl.

This translation of a Chinese manual indicates how one group views planned birth and its relation to the national economy and the individual. It is a popular book on planned birth compiled by the Planned Birth Leadership Group of the Kwangtung Provincial Revolutionary Committee. The book explains the reasons for advocating delayed marriage and planned birth, and gives emphasis to both the introduction of physiological common knowledge about pregnancy and the avoidance of pregnancy, and also to commonly used scientific methods of contraception and sterilization. The contents of this book are simple, clear, and easy to understand. Since it also has illustrations it is suitable as a reference work for basic level health workers, "barefoot doctors," youth, and the broad masses of workers and peasants. (Author abstract.)

- 514 Flato, C.,** *Emerging from "the bitter past"*. The Nation (New York), Mar 1973, 312-313. Engl.
Book review.

Ruth Sidel's book, *Women and Child Care in China: A First Hand Report*, is discussed. Mrs Sidel reports honestly her observations of a recent trip to China. China's "bitter past" was most bitter for women and children whose status was less than that of second-class citizens. In China today, women receive equal pay for equal work, and have wide job opportunities. The child-care system is highly organized and covers most activities of children.

- 515 Healey, E.,** *Family planning in China*. Family Planning (London), 21(4), Jan 1973, 75-77. Engl.

Family planning in China is an integral part of the total economic and political plan. Administration at the local level is in the hands of the Revolutionary Committee, in cooperation with the Family Planning Committee and with local hospitals. In an effort to increase medical manpower, barefoot doctors have been trained to provide simple medical care and advice. Through rural health centres and neighbourhood clinics the four chief methods of fertility control are explained and practiced. Clinics provide contraceptives, perform abortions, and refer patients to the local hospital for sterilization operations. The most important contribution to the work of population control is in the field of human relations; much time is spent in personal contacts in the home and factory. Mao's China

demands discipline, and success of the family planning programme has relied more on the power of social pressure than on legal enforcement.

- 516 Henderson, J., Katagiri, T.,** International Planned Parenthood Federation, London. *Family planning in China: press conference*. Press: International Planned Parenthood Federation (London), 5 May 1972, 1-4. Engl.

Today, 85-90 percent of Chinese couples practice birth control. Family planning is considered necessary for reasons such as: safeguarding the health of mothers and children, the need for mothers to work and study, creating conditions for education of future generations and easing the stress on the domestic economy. All methods of contraception are being used, the pill being most popular. Condoms are widely distributed free and are also available for sale. Injectable contraceptives are being used experimentally. Female sterilization is more common than vasectomy. China's success in family planning has been due primarily to the extensive use of barefoot doctors in administering the service, delivering supplies, and motivating young couples to adopt family planning methods.

- 517 International Planned Parenthood Federation, London.** *Family planning in the People's Republic of China: report on first official IPPF visit*. IPPF Medical Bulletin (London), 6(3), Jun 1972, 1-4. Engl.

Based on firsthand observations, the authors describe China's Family Planning Programme, which began in the late 1950's, and aims to limit births in order to 1) create a socialist state, 2) ensure healthy mothers and children, 3) allow mothers time for work and study, 4) create suitable conditions for education of the next generation, and 5) ease the stress on the economy. Family planning services are provided free but do not extend to the six percent of the population who are non-Han (i.e. minority groups). The programme is unique in that it has successfully used and made available all methods of birth control: late marriages, condoms, oral contraceptives, intrauterine devices, sterilization, and abortion. Barefoot doctors (about one million) and their assistants (about three million) are key field personnel in motivation for and distribution of contraceptives. Although nationwide statistics are not available, it is possible that the population growth rate is now less than two percent and that

a goal of one percent population growth rate may be reached by the year 2 000.

- 518 Katagiri, T.,** Transnational Family Research Institute, Silver Spring, Md. *Family planning and abortion in the People's Republic of China*. Abortion Research Notes (Silver Spring, Md.), 1(3), n.d., 1p. Engl.

Family planning programmes began in China in the late 1950's and accelerated following the Cultural Revolution (1966-1968). Revolutionary Committees direct the programme at the commune, factory, or residential level and barefoot doctors provide face-to-face motivation and carry contraceptives for immediate distribution. All methods of birth control are available without charge. Abortions are performed when requested during the first three months of pregnancy. The programme has resulted in a steadily declining birth rate. It seems that China will achieve the goal of one percent growth rate by the year 2 000.

- 519 Katagiri, T.,** *Report on the family planning program in the People's Republic of China*. Studies in Family Planning (New York), 4(8), Aug 1973, 216-218. Engl.

Family planning activities in five areas of China are described: a people's commune, a factory workers' residential area, a factory, an urban residential area, and a hospital. The network of family planning services and levels of acceptance in all five areas suggest the success of the programme in China. (Journal abstract.)

- 520 Katagiri, T.,** International Planned Parenthood Federation, Tokyo. *Report on the family planning programme in the People's Republic of China*. Tokyo, International Planned Parenthood Federation, May 1972. 12p. Engl.

A report on China's family planning programme, based on observations in 1972, states that a remarkable expansion of family planning activities has taken place since the Cultural Revolution. Specific examples from 1) a people's commune, 2) a factory workers' residential area, 3) a factory, 4) an urban residential area, and 5) a hospital are given. 1) At the Ton Wan People's Commune near Shanghai, family planning is carried out in the hospital, at clinics and health stations, or through the barefoot doctors. The current family planning practice rate is 90 percent. 2) Medical facilities in the Pon Pu New Village include one outpatient clinic and six health stations, and in each residential area a

health team is organized at each dwelling complex with one member specially responsible for family planning. Ninety percent of couples practice birth control. 3) The Nanking Textile Mill keeps medical records of all woman employees and carries on an educational programme of family planning in a socio-political context. The oral pill is the favoured method in urban centres. 4) In the urban residential area of Shao Yun Shang (Hangchow area), the Revolutionary Committee plays an active role in promoting family planning. 5) Peking Obstetric and Gynecology Hospital has a department of family planning operating on an outpatient basis. Medical teams are sent from the hospital to remote areas to support and train other health workers there. It is concluded that there are two reasons for the expansion of family planning activities in China: first, there has been a forceful request on the part of the Chinese people, and second, a strong network for the delivery of family planning services has been established to meet the people's request.

- 521 Lubic, R.W., Mrs. Lubic reports on China visit.** Special Delivery: News from Maternity Center Association (New York), 4(2), Autumn 1973, 3. Engl.

Reporting on a visit to mainland China, the author notes that in China's health-care delivery system most care to women is provided by female obstetric supervision, is extended into the postpartum period, and maternity leave and allowances are generous. In all four of the major teaching institutions visited, the chiefs of departments of obstetrics and gynecology were women. Normal labour and delivery are conducted without analgesia or anaesthesia. Length of hospitalization varies from two to seven days depending on facilities and the mother's condition.

- 522 Lubic, R.W.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Observations on maternity care*. In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 124-135. Engl.

Maternity care in the People's Republic of China begins at the prenatal stage, when women first suspect they are pregnant. Diagnosis and care are available in the factory health station and hospital clinics, the pattern of visits being once a month through the seventh month, and every

two weeks thereafter. Normal labour and delivery are conducted without analgesia or anaesthesia, although acupuncture is used to facilitate labour. Domiciliary delivery is more likely to occur in rural areas. Length of postpartum hospitalization varied from two to seven days. The home visit follow-up of mothers, as reported, is well planned. Infant mortality from site to site was reported in a range between eight and 30 per 1 000. A relatively small proportion of low birth-weight babies was observed. High value is placed on spacing of children, with family planning advice and service readily available. It appeared that the pill is the most utilized form of contraception in urban areas, the intrauterine device in rural. The author suggests that further attention be paid to 1) the apparently low incidence of premature and low birthweight infants, 2) utilization of obstetrical personnel to care for the normal newborn, 3) the home follow-up system and its relationship to hospital delivery, and 4) the use of services by women, including the effect of financial and leave incentives on such utilization.

- 523 Lythcott, G.I.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Pediatric health care in the People's Republic.* In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 139-163. Engl.

By contrast with pre-Liberation conditions, children in China today are healthy and well cared for. Tuberculosis and gastrointestinal diseases are no longer national scourges; morbidity and mortality from the common infectious diseases have been dramatically reduced. The incidence of premature births is strikingly low: two or three percent of all live births; an obvious inference is that there has been a marked improvement in the general health of women and in maternal care. The two most powerful influences affecting child health have been the programmes for education in personal hygiene and environmental sanitation, and programmes for universal vaccination against preventable diseases. With respect to health care delivery, especially ambulatory care, there are large numbers of health personnel and many types of delivery sites. Levels of pediatric health care vary considerably, the big discrepancies occurring between the urban municipalities and the countryside. Many hospital outpatient departments operate on a 24-hour basis and are equipped with rehydration units. The pediatric problems requiring hospitalization are not unlike

those seen in the United States. Medical research appears to have very low priority, and what little is seen is applied research. The incorporation of traditional medicine into the total health system is visible in all aspects of medicine. One sees Western medicine and traditional medicine in application everywhere, side by side.

- 524 Minkowski, A.,** *Care of the mother and child.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 218-232. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

Data on natality and mortality, supplied by the First Maternity Institute of Shanghai for the years 1957-1964 are presented. These figures indicate an impressive decline in overall mortality, a decline in the number of premature births, and a low incidence of very small fetuses. Adequately trained staff were available for competent care at all times, and measures such as breast-feeding, continuous observation of underweight infants, and so on have been influential in reducing mortality. Remarkable attention is given to women during pregnancy. Following delivery, all women have 56 days rest on full pay, and birth control instruction is given. Specific measures for childhood diseases, i.e. vaccination programmes, the general plan of health services for children, and child rearing and education from infancy to fifteen years are discussed. The organization of health services for mothers and children is illustrated with the following examples: The People's 1st of July Commune (near Shanghai), the Lungorchan Commune, near Peking, the State Textile Factory No. 18 in Shanghai, the Wu Han Steel Works in Central China. Four hospitals are mentioned with respect to pediatrics: The Municipal Children's Hospital in Peking, Fu Man Hospital in Peking, Hospital No. 2 of the Wuhan Faculty of Medicine, and Hospital No. 2 Sia Huan in Shanghai. It is concluded that emphasis on mother and child care appears to be a basic policy of the Chinese health service, and that results are quite good.

- 525 O'Leary, D.M.,** *China applies the brakes.* Depth News (Hong Kong), (210), 9 Nov 1973, 1-4. Engl.

Chinese authorities claim that their population growth rate fell below two percent by 1966. In spite of some disruptions during the Cultural Revolution, the rate is believed to be once again on the decline. A growth rate of one percent would still result in a population of one billion by the year 2 000. Measures such as deployment of city hospital medical personnel to rural areas, massive use of paramedical teams, fertility control methods, delayed marriage, and stress on equal rights and responsibilities are factors that have contributed to the success of the family planning programme. The urgency of China's population control programme is heightened by the problem of feeding so many people. The overall food picture appears encouraging but China will have to be cautious in order to feed the population adequately.

526 Orleans, L.A., *Dealing with population problems.* Bulletin of the Atomic Scientists (Chicago), 22(6), Jun 1966, 22-26. Engl.

Rather than trying to estimate the size and rate of growth of China's population, this demographer examines three major premises: 1) the government in Peking knows neither the size nor the rate of growth of China's population; 2) the size and rate of growth of the population, both urban and rural, have been of concern to the government; 3) given the desire to reduce fertility, the Chinese may now be able to achieve a measurable drop in the birth rate. He concludes that the birth control campaign in progress as of 1966 had considerable impetus and operated through the public health system, and that investment in financial and human resources necessary for an all-out effort to reduce the birth rate was being contemplated.

527 Orleans, L.A., *Every fifth child: the population of China.* London, Eyre Methuen Ltd., 1972. 191p. Engl.

This comprehensive treatise on China's demography includes discussion of figures and findings since 1953, vital statistics and population growth, urban population, population distribution and migration, national minorities, economic aspects of manpower, and food resources. Sources of data are included in an appendix. References are listed at the end of the paper.

528 Orleans, L.A., *Evidence from Chinese medical journals on current population policy.* China Quarterly (London), (40), Oct-Dec 1969, 137-146. Engl.

Looking at recent activities in China's birth control campaign, the following becomes evident: 1) mobile medical teams play an important role in publicizing the meaning of planned parenthood to peasants in rural areas, and in providing education about birth control methods. These teams use propaganda materials, meetings, exhibitions, and films, and train local health personnel to promote the programme, 2) China's birth control in 1969 centered around artificially induced abortion, 3) although sterilization was a limited urban phenomenon in the 1950's it has gained increased acceptance among the peasants, 4) the intrauterine device is the most popular contraceptive device, even surpassing the condom. With both motivation and means of birth control becoming more widespread, China may be the first rural nonindustrial country to reduce the national birth rate.

529 Potts, M., *Models for progress: United Kingdom (1919-1939) and China People's Republic (1957-1971).* In Potts, M. and Wood, C. eds., *New Concepts in Contraception: a Guide to Developments in Family Planning*, Baltimore, University Park Press, 1972, 213-228. Engl.

The birth control situation of the United Kingdom from 1919 to 1939 is compared with China's policy of 1957-1971. There are said to be several reasons for family planning in China: 1) regulation of family size in order to create a socialist state, 2) necessity for creating time for mothers to work and study, 3) to ensure sound education of forthcoming generations, and 4) to reduce the impact on domestic economy. All possible methods of fertility control have been encouraged. The suggested age for marriage is 28 for women, 30 for men. Condoms, foams, diaphragms and gels are readily available, and as of 1968 oral contraceptives of two varieties are obtainable and have become the most popular reversible technique. Almost as popular is the intrauterine device, which is in fact the preferred method in some rural communities. Abortion may be performed up to three months and is mainly intended to be used in cases of contraceptive failure. Barefoot doctors have played an important role in education in family planning; they are motivators and also distribute oral contraceptives. Health workers assist in certain aspects of family planning. Statistics available for sample areas indicate exceptional results in declining birth rate. The family planning programme in China will have a demographic impact, the goal being a one percent population

growth rate by A.D. 2 000. The Chinese model is the most rational and extensive experiment in any developing country to give community support to the whole spectrum of birth control.

- 530 Potts, M.,** *People's Republic of China.* Forthcoming in, Potts, M., Peel, J., Diggory, P., *Abortion: a Study in Medical Sociology*, Cambridge University Press, chapter 10. Engl.

Mao Tse-tung is the only national leader ever to advocate a policy of zero population growth. From a very early stage the government has encouraged all methods of fertility limitation — encouraging delayed marriages, distributing contraceptives, and providing abortion facilities. Abortion is widely performed, using the simple vacuum aspirator under acupuncture anaesthesia.

- 531 Rosenstock, J.,** *Vast nation's quest for a 'new medicine': "barefoot doctors" forge the path melding East and West for vitality.* Health Rights News (Chicago), Dec 1972, 2-4. Engl.

Under Mao Tse-tung in 1954, the need to moderate China's birth rate was considered as a necessary step towards improving health of women and children, improving education, increasing production by freeing women to join the labour force, and improving the health of the coming generation. In 1956, responsibility for fertility management was assigned to the Ministry of Health. While the birth control programme got slowly underway, women were gradually gaining equal status with men. Contraception and sterilization are provided by all health care groups at no cost to the family. In Chung-sha 70 percent of the couples practice birth control effectively and 80 percent can teach the methods. China's birth rate appears to be the lowest of any comparable population group in the developing world. Special considerations are given to working women during and after pregnancy, and child-care centres are universal.

- 532 Sidel, R.,** *Women and child care in China: a firsthand report.* New York, Hill and Wang, 1972. 207p. Engl.

This first-hand report on women and child care in China includes detailed observations of the status of women, marriage, pregnancy and childbirth, the organization of child care following the Cultural Revolution, multiple mothering, and learning to "help each other" in the nursery and to "serve the people" in the kindergarten.

Some similarities and differences between the experiences of Israel, the Soviet Union, and China are discussed.

- 533 Sinnette, C.,** *China's priority: healthy children.* Health Rights News (Chicago), Dec 1972, 14-15. Engl.

The noticeable improvement in the health of children in China is due to programmes of improved sanitation, health education, and coordinated preventive services. Prenatal supervision, use of acupuncture anaesthesia in delivery, breast-feeding, and use of paraprofessionals to supervise infant immunization have improved child health. The major pediatric problems encountered today are similar to those in industrialized countries. In spite of the existence of creches, day-care centres and kindergartens, the role of the family in child care is neither usurped nor denigrated by official policy.

- 534 Snow, E.,** *Abortion with acupuncture.* In Snow, E., *The Long Revolution*, London, Hutchinson and Co., 1973, 31-34. Engl.

Abortion as a substitute for contraceptive measures is not encouraged in China, although it is available free of charge and performed painlessly with the use of acupuncture anaesthesia. The author relates his observations of several abortions performed under acupuncture anaesthesia.

- 535 Snow, E.,** *Population care and control.* New Republic (Washington, D.C.), 164(18), 1 May 1971, 20-23. Engl.

Abortion, as a substitute for contraceptive measures, is not encouraged in China: it is usually a last resort for mothers of one or more children who have not succeeded with contraceptive devices. Abortions are free on demand, as are birth control pills, which have increasingly replaced intrauterine and other contraceptive devices. There has been a dramatic movement of urban medical personnel into the countryside, in general adherence to the following guidelines of Mao Tse-tung: 1) put prevention first; 2) serve the needs of workers, peasants, and soldiers; 3) combine rural and urban health measures with medical practice; and 4) unite Chinese traditional therapy with Western scientific knowledge. Barefoot doctors are trained for three months in hospital school, then work for a time in communes under local hospital supervision before returning for another three months training. All hospitals train Red Medical Workers, attached to neighbourhood or factory clinics,

and People's Liberation Army Medical Workers. About one-third of city hospital staff is always out on rotational work in the field, serving on mobile medical teams.

- 536 Stanley, M.,** *Visiting health teams in the People's Republic of China.* Journal of Nurse-Midwifery (New York), 18(2), Summer 1973, 14-17. Engl.

Every school, factory and farm visited in China in 1972 had a health team. Women factory workers, for instance, are examined once a year, and if pregnant, are seen monthly by the maternity staff until the seventh month; then twice in the eighth month and thereafter weekly until delivery. They are allowed eight to ten weeks maternity leave. Creches and nurseries in factories provide child care and an opportunity for working mothers to breast-feed their babies. At a commune clinic the author discovered that babies are delivered by midwives, and intrauterine devices are inserted by midwives in the commune hospital. Midwives are members of a health team including Western-type physicians, traditional Chinese doctors, laboratory technicians, barefoot doctors, etc. The author points out that this generation of child-bearing women is the first to have reached maturity since the inception of health care on a country-wide scale.

- 537 Tauber, I.B.,** *Health, mortality, and population growth in the People's Republic of China.* Seattle, University of Washington, 1974. 33p. Engl.

This paper was presented at the following Conference in Seattle and is to be published in the Proceedings in 1975: Conference on the Comparative Study of Traditional and Modern Medicine in the Chinese Societies, University of Washington, Seattle, 4-6 Feb 1974.

China's demographic heritage is analyzed as a background against which the medical system's impact on population growth can be measured. It is noted that China's demographic transition is distinctive in its numerical magnitude and social and economic intensity. High rates of growth that were generated by declining mortality are being reduced by declining fertility. Levels, patterns, and changes in the mortality of small, atypical Chinese populations can be contrasted with those in other East Asian populations of related culture before making decisions as to wider relevances in China. The goals, tasks, and interrelations of tasks and actions within the

health system are discussed in the light of demographic information available, noting that the goals of health and the definitions of needs were not phrased in demographic contexts, but the demography defined the magnitudes of the initial tasks. The major achievement of the People's Republic of China is the extension of some level of health care to most of the people. The family planning programme is distinctive in its modern procedures and research. Most current figures come from reports of visitors to health facilities in city or commune. The gross reproduction rate declined from 2.70 per 1 000 in 1953-1958 to 2.26 per 1 000 in 1968-1973; the expectation of life at birth for females increased from 27.5 years in 1953-1958 to 49.0 years in 1968-1973. The average annual rate of growth was 1.4 percent, making the population at the end of 1973, 760 million.

- 538 Tien, H.Y.,** *Planned reproduction, family formation, and fertility decline.* Columbus, Ohio State University, Apr 1974. 15p. Engl.

Unpublished document.

Paper presented to the Population Association of America, Annual Meeting, New York, April 19, 1974.

The paper discusses these aspects of China's family planning programme; family limitation and fertility transition, late marriage and fertility reduction. The lesson from China's experience is that coupled with social and economic modernization, a government programme for late marriage and an official family planning programme can serve to accelerate fertility reduction.

- 539 Varma, A.,** *Birth control and planned parenthood in China.* China Report (New Delhi), 7(2), Mar-Apr 1971, 41-48. Engl.

The progress of birth control in China before and after Communist rule, is discussed. In 1954 the government recognized the need for birth control, and advocated their policy as a step toward raising the standard of living. By 1956-57 a great deal of active work was being done on family planning and birth control. Late marriages, sex education, sterilization and abortion are aspects of the programme. Barefoot doctors are the main promoters of family planning, in addition to the mobilized cadre of the People's Liberation Army.

- 540 Victor-Bostrum Fund and The Population Crisis Committee,** Washington, D.C. *Population and family planning in the People's*

Republic of China. The Victor-Bostrum Fund and The Population Crisis Committee (Washington, D.C.), Spring 1971, 34p. Engl.

Eight articles by various authors discuss population, family planning, food, and birth control in China. An article by John Z. Bowers entitled *China's Medicine: Red and Rural* (pp. 22-24) describes the efforts being made in China, by government decree, to merge Chinese traditional medicine with scientific medicine. The emphasis, since the Cultural Revolution, is on the improvement of medical care in the rural areas and training of "barefoot doctors."

- 541 White, G.F.,** *Notes on family planning in the People's Republic of China.* New York, Population Council, May 1972. 9p. Engl. Unpublished document. To be quoted by permission only.

The results of interviews and discussions on family planning conducted in farm communes, factories, schools, universities, and hospitals in China are presented. In none of the centres visited was there a system for total data collection, nor was there evidence of county, district, provincial, or national statistics. Family planning activities are an integral part of health services. Birth control devices and information are available to every family; premarital sexual relations are rare and similarly extramarital pregnancies. Married couples desire two or three children, and the accepted age of marriage is 25 for men, 23 for women. Family planning services are used because they are desired; family planning policy is built on strong cultural tradition. Educational and propaganda devices for promotion: posters, newspapers, radio, television, ballet, are numerous.

- 542 Williams, H.,** *Child health in China.* Medical Journal of Australia (Sydney), 44(2), 19 Oct 1957, 588-591. Engl.

As a result of a visit to China in 1957, an Australian physician draws the following conclusions about child health: 1) preventive pediatric measures have included the training of midwives in aseptic methods, dealing with the major problems of nutrition, infectious diseases, and parasitic diseases, the establishment of health centres, and dissemination of birth control information and methods; 2) curative pediatrics are now being dealt with by the development of health stations and large hospital outpatient departments; 3) trained physicians and nurses are too few to cope with needs; 4) medical training of pediatricians is designed to meet the urgent needs of the large population; 5) little or no research is being carried out in problems of children's diseases; 6) a sound approach to child health has been taken by the Chinese government.

- 543 Zipper, J.,** *Chinese expand medical, family planning services.* Population Chronicle (N.Y.), No. 8, Apr 1972, 1. Engl.

Chilean medical doctors gained the following information about China's medical and family planning services while visiting that country in 1971. Propaganda for practicing contraception is intensive, making it almost compulsory. Late marriages, the absence of premarital sex, and a desire for only two children per family are part of the family planning scheme. Barefoot doctors provide information and dispense contraceptives in rural areas. Intrauterine devices and oral contraceptives are used; sterilization and abortion are free when requested.

VII Dental Health

- 544 Ho, Peh-ping.,** *More changes in China: pressure anesthesia for dental extraction.* New England Journal of Medicine (Boston), 287, 2 Nov 1972, 940-941. Engl.
Letter to the editor, referring to V. Sidel's article: The Barefoot Doctors of the People's Republic of China, New England Journal of Medicine, 286, 15 Jun 1972, 1292-3000. See entry 453.

The author relates his observations of dental extractions performed using pressure anaesthesia.

- 545 Hudson, N.C.,** *Yesterday and today: dentistry in China.* Journal of the American Dental Association (Chicago), 84, May 1972, 985-993. Engl.

Dentistry in China is now practiced largely by stomatologists rather than by dentists. In the larger cities there are Western-educated dentists; in the rural areas, various dental "charlatans." Prosthetic dentistry is practiced as in Europe, but traditional methods are also used. People are fairly well educated in dental health; the rate of dental caries is low, although malocclusion and periodontal disease are more common.

- 546 Ingle, J.I.,** National Academy of Sciences, Institute of Medicine, Washington, D.C. *Report on dentistry in China.* In Report of the Medical Delegation to the People's Republic of China, Washington, D.C., National Academy of Sciences, 1973, 83-108. Engl.

There appear to be very few university-trained dentists in China. The Ministry of Health does not appear to have an overall plan for dental care delivery. Dental clinics are scattered throughout major cities, and attached to hospitals, factory clinics, and commune hospitals. The system of reimbursement of medical fees varies; for instance the cadres' treatment is paid for by the Public Health Bureau, while the workers and peasants are reimbursed 80 percent (100 percent of dental fees) by their commune. Nonworkers may join the public health programme at the rather high rate of two yuan per month. With respect to salary of dental personnel, education and experience seem to be the deciding factor rather than position and responsibility. Stomatologist-level dentists serve mostly as diagnosticians and consultants while the dental technicians (so-called) render the majority of dental care. Dental examinations of school children and

adults showed a high rate of caries in the primary teeth as compared with a low rate in the permanent teeth. Prevention and treatment of dental disease appears to have rather low priority. There are five faculties of stomatology associated with the medical colleges of China. Students are selected by the same method as medical students, i.e. they must apply, be recommended by fellow workers, have the approval of the commune Revolutionary Committee, pass an examination, and be selected by the college Revolutionary Committee. Of the three years of training, 30 percent of the time is spent in basic sciences, 30 percent in general medical sciences, and 40 percent in stomatology. One-third of all of their time is spent as workers and dentists at rural communes. Dental technicians, who do the majority of basic treatment, are trained in dental schools, and encouraged to advance to stomatology by going to the university. Dental "workers" are trained at the commune by a university faculty member. Herbal medicines and acupuncture as applied to dental care are discussed.

- 547 Kerr, N.W.,** *Life and work of the dental surgeon and oral surgeon in the People's Republic of China.* British Journal of Oral Surgery (London), 11(1), Jul 1973, 36-42. Engl.

A British physician discusses his impressions of Chinese dental care obtained during a study tour of China in 1972. Dental students are selected not only for their academic qualifications, but also on the basis of political motivation (i.e. their knowledge of Marxism-Leninism), having lived with the masses and served the people, having proved capable of criticism and self-criticism, etc. Curriculum has been reduced to either a three- or one-year period, the first year consisting of preclinical subjects, the second of Western and traditional medicine and surgery, and the third of practical work. There is continual assessment of students but no examinations. Dentists are appointed to a post and oral surgeons become qualified by practical experience and personal initiative. Hospital facilities appeared clean but shabby. Although the range of oral and dental surgery is similar to that of Britain, the proportions are different. Oral surgeons operate using either acupuncture or local anaesthesia. Little progress has been made in dentistry and oral surgery in China since the late 1940's and early 1950's and the Chinese are now anxious to

use modern equipment, materials, and techniques.

- 548 Nygaard-Ostby, B.,** *Report of a visit to the People's Republic of China: a Norwegian's diary.* North Carolina Dental Journal (Raleigh, N.C.), 56, Apr 1973, 16-18. Engl.

Impressions of a dentist visiting China indicate that the stomatological system was abolished during the Cultural Revolution, thus initiating changes in dental education. There are no dental faculties at the universities and the teaching of dentistry is conducted at the general hospitals. There are two categories of dentist: 1) stomatologists graduated before Liberation, and 2) dental therapists educated thereafter. Dentistry appears to rank low on the list of priorities. Hospital dental equipment was simple and conventional; prosthetics of high technical standard were in evidence. Tooth extractions and major surgery under acupuncture anaesthesia were observed at the Third Teaching Hospital of Peking Medical College.

- 549 Nygaard-Ostby, B.,** *What a Western dentist found out about dental practice in the People's Republic of China.* Oral Surgery, Oral Medicine, and Oral Pathology (St. Louis), 35(5), May 1973, 668-672. Engl.

A Norwegian dentist summarizes observations of a three-week trip to China in August 1972. There is a lack of statistics on dental diseases, and there are no dental faculties at the universities. Dentistry, taught at dental clinics attached to hospitals, has no definite curriculum, but seems to concentrate on technical aspects. Although there is a desire for a dental education system, this goal ranks low in priority of necessities such as food, clothing, and housing. Dental diseases do not pose the same problems in China as in the Western world. There appears to be low prevalence of caries. Observations of acupuncture anaesthesia in a stomatologic hospital, in the departments of operative dentistry, oral surgery, and orthodontics, etc., were impressive. The Chinese specialists are quite willing to admit that as yet they have no scientific explanation of acupuncture's effectiveness.

- 550 Siu, A.C., Siu, T.K.,** *Orthodontist's visit to China.* American Journal of Orthodontics (St. Louis), 65(2), Feb 1974, 138-151. Engl.

American orthodontists report that orthodontics is practiced as a branch of dental science in China. During a study tour they observed both traditional and modern approaches to treatment of dental and orthodontic cases.

VIII Nutritional Studies

- 551 Anderson, E.N., Anderson, M.L.,** *Folk dietetics in two Chinese communities, and its implications for the study of Chinese medicine.* Forthcoming in the Proceedings of a "Conference on the Comparative Study of Traditional and Modern Medicine in Chinese Societies", The University of Washington, Seattle, February 4-6, 1974. Engl.

This paper focusses on nutrition and diet therapy in the folk medicine of two village populations of south China origin (one in the rural territories of Hong Kong, the other in Malaysia). The study was undertaken in the interests of understanding changes in nutrition and associated behaviour. Connections are traced between medical care and food and nutrition. References are provided.

- 552 Ng, W.K., Wadsworth, G.R.,** *Nutrition.* In Wegman, M.E., Lin, T., Purcell, E.F., eds., *Public Health in the People's Republic of China: Report of a Conference*, New York, Josiah Macy, Jr. Foundation, 1973, 208-217. Engl.

Conference sponsored by the School of Public Health and the Center for Chinese Studies of the University of Michigan and the Josiah Macy, Jr. Foundation.

In the absence of detailed information about actual food intake and nutritional status, a speculative assessment of the nutritional problems of China is presented. Agricultural production is briefly described for North, South, and Central China. The use of night soil in agriculture must be modified by methods to prevent health hazards. Recent figures indicate that Chinese children are now bigger, and that incidence of vitamin-deficiency diseases is declining. Observations indicate that malnutrition and starvation of the old days are absent, but more specific information on such improvements is not available.

- 553 W.K.,** *State of nutrition in Communist China.* *China Quarterly* (London), (7), 16 Oct 1961, 121-127. Engl.

Nutritional surveys of professional competence and honesty have been undertaken in recent years (prior to 1961) in certain Chinese localities. The surveys are said to have revealed daily food intake (in calories) of male and female peasants. Chinese nutritionists seem satisfied with the vitamin content of the diet but seem to be on the defensive when discussing protein intake. The

survey indicates an average food intake of 2 000 calories per person per day; at this level the population will remain in reasonably good physical condition. But below this level, as was the case in 1960, there is bound to be loss of body weight and retarded growth among children. The conclusion drawn from this first nutritional survey of post-revolutionary China is that the diet is sufficient to sustain the Chinese population in good health and working condition. Indications are that if the rate of production can be kept in step with the reproduction rate of the population, food supplies will continue to be sufficient.

- 554 Whyte, R.O.,** *Rural nutrition in China.* Hong Kong, Oxford University Press, 1972. 54p. Engl.

This comprehensive survey of nutrition in rural China looks at such aspects as land resources for food production, the ecoclimate, population according to various estimates, rural health and dietary conditions, Chinese dietary traditions, vulnerable groups of the population, principal sources of calories, plant and animal protein, and the social and political implications of nutrition. The topic of this monograph is of considerable importance for little work has been done on this subject in the past. Specialists in the production, distribution, and utilization of agricultural crops are profoundly interested in the nutrition of the urban and rural population of the Chinese People's Republic. It is difficult to define precisely the actual situation in China at present because little basic data is available. Neither is it possible to estimate exactly the degrees of undernutrition or malnutrition, in the absence of dietary surveys and clinical and biochemical examinations. Although emphasis since the Cultural Revolution has been placed on agricultural development such as increased food production and the improvement of many aspects of rural life, nevertheless the basic problems or rural nutrition put forward in this work still remain. (Book abstract.)

- 555 Yeh, S.D., Chow, B.F.,** John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. *Nutrition.* In Quinn, J.R., ed., *Medicine and Public Health in the People's Republic of China*, Washington, D.C., U.S. Dept. of Health, Education and Welfare, Publication No. (NIH) 73-67, 1973, 215-240. Engl.

With improvements in agricultural and industrial technology, transportation, and nationwide planning, food shortages in the People's Republic of China have been reduced. The general health of people has improved with the eradication of major parasitic and infectious diseases. The provision of good nutrition to pregnant women, in order to prepare a solid foundation for their children, is the most important challenge to Chinese leaders and nutritional workers.

In spite of reported improvements in the nutritional status of the people, they are now faced with equally important nutritional problems such as control of goiter, cancer, etc. The authors recommend that studies be made to find out precisely the nutritional status of Chinese people at various ages and from different geographic areas.

IX Impressions of Western Visitors

- 556 Elliott, K.A.,** *Hundred flowers: a visit to the People's Republic of China.* Montreal, 17 May 1964. 5p. Engl.

Sermon delivered at the Unitarian Church of Montreal. Unpublished document.

Visiting China in 1964, a Western doctor observed that most of the reorganized activities in every field had begun only six to eight years previously. This applied to research installations where sophisticated scientific work was being carried on, indicating that China would soon contribute significantly to world science. Conformity of opinion about social and political affairs maintained by an all-pervading system of "earnest persuasion" was noted. There is a pervasive attitude of dedication in China, evidenced for instance by young doctors and teachers going to practice in distant rural districts and by continual talk of the need for improvement. Members of the medical profession emphasized their need for more and better doctors, nurses, and technicians.

- 557 Elliott, K.A.,** *Brief report on a month in the People's Republic of China as Norman Bethune Exchange Professor from McGill University to the Chinese Medical College.* Montreal, 1964. 4p. Engl.

Unpublished document.

Visits in 1964 by a Western doctor to three medical colleges, two hospitals, one university, and three research institutes in China indicate that the standards of medical work and teaching are high, and suggest that the Chinese contribution to medical science is likely to be considerable. Medical service to rural areas and preventive medicine receive high priority. Young doctors go readily to rural areas. Preventive medicine is pursued by ordinary methods of hygiene and prophylaxis, and by students and physicians conducting health education campaigns.

- 558 National Medical Association, New York.** *NMA China visit number-forward.* Journal of the National Medical Association (New York), 65(1), Jan 1973, 1-2, 20. Engl.

Preliminary procedures and international arrangements preceding the visit of a ten-member delegation from the National Medical Association to China in 1972 are discussed. Members of the delegation are listed.

- 559 Taylor, H.E.,** *General report of visit to the People's Republic of China.* n.p., n.d. 14p. Engl.

Unpublished document prepared by a member of Canadian Medical Delegation to the People's Republic of China, 1973.

This is an outline of the itinerary followed on a visit to China, with comments on all aspects of life in China. In a commune, living expenses are minimal and medical care free or very inexpensive (two yuan per person per year to the commune treasury). The commune hospital is staffed by modern Western-type physicians and traditional physicians. Barefoot doctors are attached to the teams and brigades. It was obvious that three of Mao's policies are to educate the children, involve the masses, and expand the rural areas.

- 560 Wallace, J.D.,** *Door is open to China's medical knowledge.* Canadian Medical Association Journal (Ottawa), 109, 7 Jul 1973, 60. Engl.

It is the impression of a member of a Canadian Medical Delegation which visited China in 1973 that health services in China are serving the people well, and that there are a number of procedures, therapeutic approaches, pharmaceuticals, and systems that could be extremely valuable if adapted to Canadian conditions. The emphasis in China is on prevention; such diseases as malaria, schistosomiasis and venereal disease are now almost unknown.

Appendix I

Articles Identified but not Received for Processing

The items listed here have not been included in the main text of the bibliography for one of two reasons: either the item was not received in time to be annotated, or insufficient source information made it impossible to trace the document. We invite readers to send us further information on the incomplete citations listed below, and any additional material that may be relevant so that these may be annotated and included in future editions of the bibliography.

- 001** *Advanced health section serving the people whole-heartedly.* China Pictorial (Peking), (3), 1969, 26-27. Chiefly illus.
- 002** Alekseenko, I.P., *Ocherki o kitaiskoi narodnoi meditsine* (Russian: *Notes on Chinese folk medicine*). Kiev, Gos. med. izd-vo USSR, 1959. 210 p.
- 003** *Barefoot doctors.* Peking Review (Peking), 16(21), 25 May 1973, 15-18.
- 004** *Barefoot doctors are fine!* China Pictorial (Peking), (1), 1969, 8-11. Chiefly illus.
- 005** Barendsen, R.D., *The educational revolution in China.* Washington, D.C., U.S. Dept. of Health, Education and Welfare, DHEW publication No. (OE) 73-19102, 1973. 52 p.
- 006** *Battle for health.* China Reconstructs (Peking), 2(2), 1953, 21-23.
- 007** Biener, K., *Chinesische gesundheitsfürsorge* (German: *Health Care in China*). Das deutsche Gesundheitswesen (Berlin), 12(30), 19 Sep 1957, 1178-1182.
- 008** *Big overall reduction of medicine prices.* China Pictorial (Peking), (2), 1970, 34-37. Chiefly illus.
- 009** Boldyrev, T.E., *Patrioticheskoe dvizhenie za okhranu zdorov'ia naroda v Kitaiskoi Narodnoi Respublike* (Russian: *The patriotic movement for the protection of public health in the People's Republic of China*). Gigiena i sanitariia (Moscow), 22(4), Apr 1957, 48-52.
- 010** Bolocan, A.K., *The physician in the practice of traditional Chinese medicine in China and the U.S., contrasted and compared with the practice of Western medicine.* M.A. Thesis in Anthropology, Columbia University, East Asian Institute, New York, 1957. 168 p.
- 011** Bowers, J.Z., *Chung-I: Chinese traditional medicine.* Asia (New York), (5), Spring 1966, 62-69.
- 012** Bowers, J.Z., *Traditionelle und westliche medizin in maoistischer sicht* (German: *Traditional and western medicine from the Maoist viewpoint*). China-Analysen (Frankfurt), (9), Oct 1970, 16-22.
- 013** Branch, M., *Black American nurse visits the PRC.* Nursing Forum (Chicago), (12), 1973, 402-411.
- 014** Bridgman, R.F., *La Chine populaire devant les problemes de sa sante publique* (French: *The People's Republic of China faces public health problems*). Comptes rendus mensuels des seances de l'Academie des sciences d'outre-mer, (21), Jul-Oct 1961, 383-386.
- 015** Bridgman, R.F., *La medecine dans la Chine antique* (French: *Medicine in ancient China*). Melanges Chinois et Boudiques (Louvain), 10, Jul 1955, 1-213.
- 016** Burley, T.M., *China's medical strides: a model for Asia.* Depthnews (Manila), (249), 1974, 1-4.
- 017** Bussi, L., Oliaro, T., *La medicina in Cina* (Italian: *Medicine in China*). Minerva Medica (Turin), (64), 11 Apr 1973, 1205-1207.
- 018** Capperauld, I., *Acupuncture anaesthesia and medicine in China today.* Surgery, Gynecology and Obstetrics (Chicago), (135), Sep 1972, 440-445.
- 019** *Catalogue of Chinese medical publications.* Peking, People's Hygiene Press, 1957.
- 020** *Chairman Mao gave her a new life: the advanced deed of the medical section of a PLA unit which, overcoming all difficulties, successfully removed a 90-jin tumour.* China Pictorial (Peking), (8), 1968, 24-27. Chiefly illus.

- 021 Chang, L.G., *Acupuncture: a selected bibliography*. Chinese Culture (Taipei), 5(1), Jun 1963, 157-160.
- 022 Cheng, T.O., *Medical advances in the People's Republic of China*. Hospital Medicine (London). (Date of publication not available.)
- 023 *China's medical services: Mao's thought in operation*. China News Summary (Hong Kong), (231), 1968, 7-9.
- 024 *Chinese herbal medicine is a treasure-house*. China Pictorial (Peking), (3), 1971, 24-27. Chiefly illus.
- 025 Chinese Medical Association, Peking. *Child health care in new China*. American Journal of Chinese Medicine (New York), 11(2), Apr 1974, 149-158.
- 026 Coffin, E., Miller, B.D., *Health and sanitation*. In *A regional handbook on Northwest China*. New Haven, Human Relations Area Files, 2, 1956, 386-400. HRAF subcontractor's monographs, 59; Washington 5. Compiled by Far Eastern and Russian Institute, University of Washington.
- 027 *Co-operative medical service is fine!* China Pictorial (Peking), (4), 1969, 22-25. Chiefly illus.
- 028 Criqui, F., *La medecine chinoise* (French: *Chinese medicine*). Editions du Cap (Monte Carlo), 1967. 96 p.
- 029 Croizier, R.C., *Medicine and modernization in China: an historical overview*. Paper presented at the Conference on the Comparative Study of Traditional and Modern Medicine in Chinese Society. The University of Washington, Department of Epidemiology and International Health, Seattle, 4-6 Feb, 1974. (Proceedings to be published in 1975.)
- 030 Croizier, R.C., *Medicine, modernization and cultural crisis: Chung i and Ayurveda in the twentieth century*. In Frederic Wakeman, Jr., ed., *Nothing concealed: essays in honor of Liu Yu-yun*. Distributed by Chinese Materials Center Inc., San Francisco, 1970, 193-219.
- 031 Croizier, R.C., *Traditional medicine in Communist China*. Far East Reporter (New York). (Date of publication not available.)
- 032 Dai, D.S., *Dentistry in China, old and new*. National Reconstruction (New York), (6), Jan, 48-56. (Date of publication not available.)
- 033 Daniels, G.L., *China's barefoot doctors*, Journal of the Medical Society of New Jersey (Trenton), 71, Jun 1974, 486-487.
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Appendix II

A Selection of Articles Published in The Chinese Medical Journal, Peking, 1960-1974

The Chinese Medical Journal, the official publication of the Chinese Medical Association in Peking, was one of the few professional journals published in English for distribution outside China. From June 1960 to December 1961 *The Chinese Medical Journal (CMJ)* ceased publication. In October 1966 the name of the journal changed to *China's Medicine (CM)*. From that time until December 1968 radical changes took place in the format of the journal; once wholly preoccupied with medical research, it became a journal totally dedicated to Mao Tse-tung thought. By the spring of 1967 foreign footnoting of articles had disappeared and all technical articles were introduced by and interspersed with quotations from Mao. The publication of the journal ceased in January of 1969 only to resume as the *Chinese Medical Journal*, No. 1, in January 1973. It is issued monthly, and usually contains about 90 pages, three-quarters of which are devoted to scientific articles written in Chinese, and the rest to illustrations and English abstracts of about two-thirds of the articles. The new *Chinese Medical Journal* differs from its predecessor *China's Medicine* in that it presents original research from prestigious Chinese institutes and universities, although two articles criticizing Lin Piao and Confucius did appear for the first time in issue No. 2, February 1974. Even though most, if not all, of the articles that have appeared in the new *Chinese Medical Journal* to date are clearly out of the subject scope of this bibliography, we have cited below a number of references from issue No. 1-12, 1973, and issue No. 1-2, 1974, to give the reader some idea of the diversified nature of material being covered in this new journal. The page references to the articles published in 1973 and 1974 indicate the pages on which the English language abstract appears, not the original Chinese paper. A cover-to-cover English translation of the *Chinese Medical Journal* will be available from the Plenum Publishing Corporation, 227 West 17th Street, New York, New York 10011, as of autumn 1974.

Bearing in mind the above information the reader will wish to examine more closely the articles from both the old and new *Chinese Medical Journal* and *China's Medicine* that we have identified but not abstracted. However, a number of these articles, along with a few others that appeared in *The Chinese Medical Journal* between 1949 and 1971, have been abstracted by Lillian

Ling-Wen Lin in an *Annotated Bibliography* that appeared in *Public Health in the People's Republic of China*, Myron E. Wegman, Tsung-yi Lin and Elizabeth F. Purcell, eds., Josiah Macy, Jr. Foundation, New York, 1974 (see entry 022 in chapter I.1).

English language articles published in other Chinese publications such as *China Reconstructs*, *Chinese Literature*, *National Reconstruction*, *Peking Review*, *People's China*, etc. are included either in the main body of this bibliography or in Appendix I.

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Chang Chih-li, Chao Ping-nan, et al., 200 Cases of Psoriasis Treated with Traditional Chinese Medicine, CMJ, No. 4, Apr, 57.

Traditional-Western Combined Treatment of Acute Perforation of Peptic Ulcer. Nan K'ai Hospital, Tientsin, CMJ, No. 2, Feb, 20.

Small Vessel Anastomosis: V. Effect of Anticoagulant Therapy on Patency Rate. Department of Surgery, Chung Shan Hospital of Shanghai First Medical College, Shanghai, CMJ, No. 1, Jan, 6.

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Experimental Studies on Prevention of Muscular Cramps Induced by Two F-Type Schistosomicides. Department of Pharmacology, Shanghai First Medical College, Shanghai, CMJ, No. 1, Jan, 10.

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1968

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1963

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1960

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Appendix III

Sources of Information About Chinese Documents

According to the *Introduction to A Bibliography of Chinese Sources on Medicine and Public Health in the People's Republic of China: 1960-1970* (see entry 018 in Chapter I.1), published by the John E. Fogarty International Center for Advanced Study in the Health Services in 1973:

The People's Republic has probably published more journals and monographs on medicine and public health than on any other scientific discipline. A substantial proportion of these materials is available in the United States, but the coverage is by no means complete and there are many missing issues and even missing years.... virtually all the medical and related journals available in the United States have, in fact, been abstracted or translated by the Joint Publications Research Service (JPRS), now a component of the National Technical Information Service (NTIS), U.S. Department of Commerce. The coverage is so complete because many of the sources that were not processed by JPRS during the 1960-66 period — when China was turning out a large number of journals — were picked up and abstracted after mid-1966 — when the PRC ceased publishing all but a handful of titles.

It is estimated that 95 percent of all the items translated or abstracted from Chinese medical journals are included in this bibliography.

The 486-page bibliography is divided into two parts, one dealing with journals and newspapers and the other with monographs. Part I is further divided into a "Clinical" section and a "Health-related" section. Chapters in the former include, *inter alia*, Acupuncture and Moxibustion, Infectious Diseases, Dentistry and Oral Surgery, Endocrinology, Metabolism and Nutrition, Parasitology. The "Health-related" section is divided as follows: Biomedical Research, Pharmacology, Public Health, Health Manpower Training, Hospital Service, Nursing, Human Development, Publications, Political (doctrines in medicine).

Monographs cited in Part II are listed under the following chapter headings: Acupuncture and Moxibustion, Cardiovascular, Gastroenterology, Infectious Diseases, Neoplastic Diseases, Neurology, Obstetrics and Gynecology, Ophthalmology, Otolaryngology, Pharmacology, Public Health and Hygiene, Surgery, Traditional Medicine, Old Medical Texts, Miscellaneous.

A quarterly publication entitled *TRANSDEX: Bibliography and Index to the United States Joint Publications Research Service (JPRS) Translations* serves as an index to all those publications and documents translated by the U.S. Joint Publications Research Service. Publications from all languages are included but the emphasis is on those from Asia, Eastern Europe, Africa, and Latin America. Some 30 000 references per year for all types of publications, including newspapers, are indexed by subject, author, country, and name of publication. Photocopies of all documents are available from the National Technical Information Service, U.S. Department of Commerce, P.O. Box 1553, Springfield, Virginia 22151. Further information on *TRANSDEX* should be requested from: CCM Information Corporation, 866 Third Avenue, New York, N.Y. 10022.

In addition to the translations prepared by the Joint Publications Research Service, the Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011, will be publishing later this year cover-to-cover translations for (a) *Acta Entomologica Sinica*, Chinese Society for Entomology, Peking; (b) *Acta Microbiologica Sinica*, Chinese Society for Microbiology, Peking; (c) *Kexue Tongbao*, Academia Sinica, Peking. All of these journals contain from time to time articles of interest to the medical community. Translations of periodicals in biomedicine will also be prepared by Plenum at a later date. The United Kingdom Regional Information Office, Hong Kong, and the Consulate-General of the United States of America, Hong Kong, also select materials for translation from Chinese newspapers and periodicals. For details of translations made by these two agencies see under "Hong Kong" in section II of Appendix IV.

According to T.O. Cheng in an editorial for the *Annals of Internal Medicine*, Vol. 79, No. 6, December 1973, (see entry 010), the Chinese Medical Association will be publishing in the near future a *Chinese Journal of Internal Medicine* and a *Chinese Journal of Surgery*, both in Chinese. A new journal called *Middle Grade Medical Bulletin*, which was first published in 1965 but soon ceased publication during the Cultural Revolution, will also be reissued by the Chinese Medical Association. It will be in Chinese and directed toward the doctors who finished three years of medical school after completion of only junior high school education, and toward

the barefoot doctors. According to Cheng “its emphasis will be on practical aspects of diagnosis and treatment — new and old and traditional and Western — of the more common diseases in urban and rural China.”

In view of the above, it was considered unnecessary to reproduce the references cited in the above-mentioned bibliography.

Appendix IV

Names and Addresses of Select Authors and Institutions

The list below is divided into the following three categories:

- I Authors and Researchers
- II Research and University Study Centres
- III Libraries with Special Collections

In Section I selected author names are listed alphabetically. In Sections II and III the institutions are listed alphabetically: first of all, by country of origin, and then by institution name.

I Authors and Researchers

- 1) Dr John S. Aird
Chief, China Branch
Foreign Demographic Analysis Division
Social and Economics Statistics
Administration
U.S. Department of Commerce
Washington, D.C.
U.S.A.
- 2) Professor E. Russell Alexander
Chairman
Department of Epidemiology and
International Health
University of Washington
School of Public Health
Seattle, Washington 98105
U.S.A.
- 3) Professeur Jean Bernard (Hematologue)
Doyen
Faculte de Medecine de Lariboisiere — Saint
Louis
Hopital Lariboisiere
2, rue Ambroise Pare
Paris
France
- 4) Docteur R.F. Bridgman
4, rue Herschel
Paris 7e
France
- 5) Dr John Z. Bowers
President
Josiah Macy, Jr. Foundation
277 Park Avenue
New York, New York 10017
U.S.A.
- 6) Dr Edmund C. Casey
President

At present editing for publication the *Proceedings of a Conference on the Comparative Study of Traditional and Modern Medicine in Chinese Society*, the University of Washington, Seattle, February 4-6, 1974.

- National Medical Association, Inc.
437 Melish Avenue
Cincinnati, Ohio 45339
U.S.A.
- 7) Dr Ralph J. Cazort
Dean
School of Medicine
Meharry Medical College
1005 18th Avenue North
Nashville, Tennessee 37208
U.S.A.
 - 8) Dr Chu-yuan Cheng
Department of Economics
College of Business
Ball State University
Muncie, Indiana 47306
U.S.A.
 - 9) Dr Pi-chao Chen
Assistant Professor
Department of Political Science
College of Liberal Arts
Wayne State University
Detroit, Michigan 48202
U.S.A.
 - 10) Dr Tien-hsi Cheng
Professor of Zoology
Department of Biology
College of Science
Pennsylvania State University
University Park, Pennsylvania 16802
U.S.A.
 - 11) Dr Tsung O. Cheng
Professor of Medicine
George Washington University Medical
School
1331 H Street N.W.
Washington, D.C. 20005
U.S.A.
 - 12) Dr Martin Cherkasky
Director
Montefiore Hospital and Medical Center
111 East 210th Street
Bronx, New York 10467
U.S.A.
 - 13) Dr Robert Chin
Professor of Psychology
Boston University
Boston, Massachusetts 02215
U.S.A.
 - 14) Dr Ronald V. Christie
Dean Emeritus
Faculty of Medicine
McGill University

- Montreal, Quebec
Canada
- 15) Dr W. Montague Cobb
Professor of Anatomy
Howard University
520 W Street N.W.
Washington, D.C. 20001
U.S.A.
 - 16) Dr E. Leon Cooper
Director
Comprehensive Health Services
Office of Health Affairs
Office of Economic Opportunity
1200 19th Street N.W.
Washington, D.C.
U.S.A.
 - 17) Dr Ralph Crozier
East Asia Center
Rochester University
Rochester, New York 14627
U.S.A.
 - 18) Ms Genevieve Dean
The University of Sussex
Science Policy Research Unit
Nuffield Building
Falmer, Brighton
Sussex BN1 9RF
England
- Ms Dean has prepared a bibliography on science and technology in China, which includes a section on health. The bibliography is now in press.
- 19) Dr E. Grey Dimond
Provost for the Health Sciences
School of Medicine
University of Missouri
2220 Holmes Street
Kansas City, Missouri 64110
U.S.A.
 - 20) General William H. Draper Jr.
Honorary Chairman
Population Crisis Committee
1835 K Street N.W.
Washington, D.C. 20006
U.S.A.
 - 21) Professor K.A.C. Elliott
Department of Bio-Chemistry
McGill University
Montreal 110, Quebec
Canada
 - 22) Professor Bruce Esposito
Department of History
University of Hartford
220 Bloomfield Avenue
West Hartford, Connecticut 06117
U.S.A.

Preparing a monograph on *The Development of Medicine and Medical Education in the People's Republic of China since 1969.*

- 23) Dr J.R. Evans
President
University of Toronto
Toronto, Ontario
Canada
 - 24) Dr Oscar Felsenfeld
Chief of Communicable Diseases
Tulane University
Delta Regional Primate Center
Covington, Louisiana
U.S.A.
 - 25) Dr H. Jack Geiger
Professor of Community Medicine
Medical School
State University of New York
Stony Brook, New York
U.S.A.
 - 26) Dr G. Gingras
Executive Director
Rehabilitation Institute of Montreal
6300 Darlington Avenue
Montreal 26, Quebec
Canada
 - 27) Dr L.H.D. Gordon
Department of History
Purdue University
Lafayette, Indiana 47907
U.S.A.
 - 28) Dr Lu Gwei-Djen
Research Fellow
Lucy Cavendish College
Lady Margaret Road
Cambridge
England
- Preparing Volume VI of the *Science and Civilization in China* series on biological and medical sciences. See entry 084 in Chapter II.
- 29) Dr Peter S. Heller
Assistant Professor
Department of Economics
Center for Research on Economic Development
University of Michigan
Ann Arbor, Michigan 48104
U.S.A.
 - 30) Dr J.S. Horn
Lecturer
Department of Anatomy
London Hospital Medical College
Turner Street
London E1
England

- 31) Docteur Pierre Huard
L'Ecole Pratique des Hautes Etudes
Sorbonne
47, rue des Ecoles
Paris
France
- 32) Dr John Ingle
Institute of Medicine
National Academy of Science
2101 Constitution Avenue
Washington, D.C. 20418
U.S.A.
- 33) Dr Kewal Jain
145 East 13th Street
Apartment 303
North Vancouver, British Columbia
Canada
- 34) Dr Frederick A. Kao
Editor
American Journal of Chinese Medicine
c/o Downstate Medical Center
450 Clarkson Avenue
Brooklyn, New York
U.S.A.
- 35) Dr Arthur M. Kleinman
Department of the History of Science
Harvard University
Holyoke Center 838
Cambridge, Massachusetts 02138
U.S.A.
- 36) Dr David M. Lampton
Research Fellow
Department of Political Science
Columbia University
New York, New York 10032
U.S.A.
- 37) Dr J.L. Leger
Chief of Radiology
Hôpital Notre Dame
Professor of Radiology
University of Montreal
1560 Sherbrooke Street East
Montreal, Quebec
Canada
- 38) Dr Tsung-yi Lin
Professor of Mental Health
School of Public Health
University of Michigan
Ann Arbor, Michigan 48104
U.S.A.
- 39) Mrs Ruth Watson Lubic
General Director
Maternity Center Association
48 East 92nd Street
New York, New York 10028
U.S.A.
- 40) Ms An Elissa Lucas
Harvard University

1737 Cambridge Street
Cambridge, Massachusetts 02138
U.S.A.

Preparing a Ph.D. thesis that "... will be a historical reconstruction of central policy and personnel changes affecting medical and public health management with particular attention given to – Soviet 'modelling' in the mid-1950's, Party vs. professional struggles for control over scientific and technical work and the effects of the Cultural Revolution on public health organs."

- 41) Dr George I. Lythcott
Associate Dean for Urban and Community Health Affairs
College of Physicians and Surgeons
Columbia University
New York, New York 10032
U.S.A.
- 42) Dr Marion Mann
Dean
Howard University Medical School
520 W Street N.W.
Washington, D.C. 20001
U.S.A.
- 43) Docteur A. Minkowski
Directeur
Centre de Recherches Biologiques
Neonatales
Clinique Obstetricale Baudelocque
Hopital Port-Royal
Universite Rene Descartes
123 Boulevard de Port-Royal
75674 Paris Cedex 14
France
- 44) Dr H. McLennan
Professor of Physiology
University of British Columbia
Vancouver 8, British Columbia
Canada
- 45) Dr W.K. Ng
Professor
Department of Social Medicine and Public Health
Faculty of Medicine
University of Singapore
Outram Hill, Singapore 3
Republic of Singapore
- 46) Dr Michel Oksenberg
Associate Professor of Political Science
East Asian Institute
Columbia University
New York, New York 10027
U.S.A.
- 47) Dr Leo A. Orleans
China Research Specialist
Reference Department

The Library of Congress
Washington, D.C. 20540
U.S.A.

- 48) Dr T.W. Robinson
The RAND Corporation
1700 Main Street
Santa Monica, California 90406
U.S.A.

- 49) Miss Susan B. Rifkin
Research Fellow
Institute of Developmental Studies
University of Sussex
Nuffield Building
Falmer, Brighton
Sussex BN1 9RF
England

- 50) Professor Janet Salaff
Department of Sociology
University of Toronto
563 Spadina Avenue
Toronto, Ontario M5S 1A1
Canada

- 51) Dr Ernest Saward
Professor of Social Medicine
University of Rochester
School of Medicine and Dentistry
Rochester, New York 14627
U.S.A.

- 52) Mrs Ruth Sidel
3614 Johnson Avenue
Bronx, New York 10463
U.S.A.

Will be publishing *The Families of Fengsheng: Urban Life in the People's Republic Of China*, in the Penguin Books Series, Baltimore in Fall 1974. An article by her on *The Organization of Urban Neighborhood Health and Social Services in China*, will also appear later this year in *China As We Saw It*, by Joseph R. Quinn, Fogarty International Center, U.S. Department of Health, Education and Welfare, Bethesda, Maryland, U.S.A.

- 53) Dr Victor W. Sidel
Chief
Department of Social Medicine
Montefiore Hospital and Medical Center
111 East 210th Street
Bronx, New York 10467
U.S.A.

- 54) Dr Ezra F. Vogel
Director
East Asia Research Center
Harvard University
Archibald Cary Coolidge Hall
Room 301
1737 Cambridge Street
Cambridge, Massachusetts 02138
U.S.A.

- 55) Dr Emerson Walden
4200 Edmondson Avenue
Baltimore, Maryland 21229
U.S.A.

- 56) Dr J.D. Wallace
Secretary General
The Canadian Medical Association
1867 Alta Vista Drive
P.O. Box 8650
Ottawa, Ontario K1G 0G8
Canada

- 57) Professor Rosalind Wang
Department of Nursing
Russell Sage College
Troy, New York
U.S.A.

- 58) Dr Myron E. Wegman
Dean
School of Public Health
University of Michigan
Ann Arbor, Michigan 48104
U.S.A.

- 59) Dr Chang Wei-hsun
Assistant Director-General
World Health Organization (WHO)
Avenue Appia
1211 Geneva 27
Switzerland

- 60) Dr Paul D. White
Massachusetts General Hospital
Fruit Street
Boston, Massachusetts
U.S.A.

- 61) Professor Ming Wong
Chargé de Recherche Scientifique
87 Boulevard de Port-Royal
Paris 75013
France

- 62) Dr Robert M. Worth
Professor of Public Health
School of Public Health
University of Hawaii
1960 East-West Road
Honolulu, Hawaii 96822
U.S.A.

II Research and University Study Centres

Australia

Contemporary China Centre
The Australian National University
The Research School of Pacific Studies
Department of Far Eastern History
Box 4 PO
Canberra, A.C.T. 2600
Australia

Health Care in the People's Republic of China

Att'n: Professor A. Donnithorne
Head

The Centre publishes monographs and other papers in the *Contemporary China Series*.

China, People's Republic.

Chinese Medical Association
42 Wu Szu Ta Chieh
Peking
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Germany
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Tokyo
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Far East Area Studies
Washington, D.C. 20016
U.S.A.

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Coordinator

The Brookings Institution
1775 Massachusetts Avenue N.W.
Washington, D.C. 20036
U.S.A.
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Franklin Hall
Ithaca, New York 14850
U.S.A.
Att'n: The Director

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Chinese Studies
Washington, D.C. 20006
U.S.A.
Att'n: Dr Franz Michael
Director

Harvard University
East Asian Research Center

Health Care in the People's Republic of China

1737 Cambridge Street
Room 301
Cambridge, Massachusetts 02138
U.S.A.
Att'n: Professor John K. Fairbank
Director

John E. Fogarty International Center
Department of Health, Education and
Welfare
National Institutes of Health
Bethesda, Maryland 20014
U.S.A.
Att'n: Dr Joseph R. Quinn
Chief, International Cooperation and
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Att'n: Mr Tien-yi Li
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